THE BUILDER

A Journal for the Architect & Constructor

SEPTEMBER 14, 1928 — No. 4467

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86TH YEAR

R.A. Exhibition, 1928.

The Hall, Rhodes House, Oxford.

Sir Herbert Baker, A.R.A., F.R.I.B.A., Architect.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXXV. No. 4467. SEPTEMBER 14, 1928

HEALTH, ARCHITECTURE AND TRADITION

IT is a good thing for architects to hear all that the scientists have to tell them, for it is their deliberations that make a check upon the drift of our otherwise unguided instincts. It is, however, a fact that instinct is more often the propelling force in matters of progress than the actual dictates of science. Improved sanitation came about more as a result of a natural dislike of dirt and nastiness than from a study of the activities and useful habits of ærobic and anærobic microbes. At any rate, it was the first that suggested the latter.

It may be that it is the thrill of the open-air life that induces us to take more and more advantage of Nature's tonics than a knowledge of the spectrum of light. With all our scientific knowledge it is often the animal that shows the greater regard for personal hygiene, for Nature has a way of looking after her own, and a way of showing a sense of outrage when with fool's courage we are tempted to show her the way she ought to work.

There is a tendency to attribute an arriving omnipotence to the increasing knowledge that has been placed in the hands of the human race, and we may be in need of such reminders as disasters in the air, or the bursting of great river banks, to teach us what a small fraction of the great scheme of the universe has yet become understood by our scientists, and that human knowledge has yet but scratched the surface of the truth. We are more gently reminded of the same facts by the contrast between the sickly face of the exponent of a scientific diet and the happy countenance of the good trencherman.

We have to remember that science has made many mistakes, and has spent much energy in correcting them. It is not so many generations ago that the medical faculty, finding the relief to over-taxed arteries which a little blood-letting afforded, prescribed the treatment for nearly all the ills that man suffered from. Many a poor anæmic subject became further starved of vital force under a treatment found of immediate relief in certain other cases of exaggerated blood pressure. Now it is more often a case of blood transfusion than of blood-letting; and though we are doubtless so much nearer the truth, we are yet left with the feeling that science is still only feeling its way.

Professor Leonard Hill, in an admirable address at the A.A. recently, confined himself mainly to facts which we lack the knowledge to confute, even if we were not convinced of their truth. Personal experiences of the benefits derived from a holiday, even a day's holiday, in the open air, are sufficient to convince us of its tonic effects; and pictures of children who have thrived in sun-bath treatment are merely by way of corroboration. But although he dealt wisely with facts, there were obviously inferences which he wished his architect audience to draw, and which the subsequent speakers were clearly inclined to draw, which we should do well to think over before accepting them as a logical conclusion of the facts.

The triumphs of the sanatoria have been proved without question. They show many victories of science over disease, and the discovery of a natural medicine more powerful than the chest protectors and woollen mufflers of our ancestors. But does it naturally follow that the medicine may be adopted by all of us as a food, and are the architects to accept it as such and express the new homes of the future as permanent sanatoria? At Olympia the forecast appeared to have been accepted, but artistic instinct keeps its own counsel and follows its natural urge.

The home of health may be a cage of special glass through which the ultra-violet ray may penetrate, but the home of man is first and foremost a retreat, where he may feel secure not only from the violence of the unfriendly but from the curiosity of the friendly. In it he expects not only light, but light and shade.

The open loggia, which has become a common feature in the house of to-day, is the place where man expects to find pleasant experience rather than health, and as natural pleasure is Nature's hint as to right living, we have here an instance where we may very well trust ourselves to instinct, and leave science merely to confirm our way of living.

Times and manners have changed the outward expression of the dwelling-house, from the forbidding massiveness of the Norman keep where security demanded solid strength and mass with the smallest openings possible, down through easier times in which the desire for light and outlook found expression in larger windows and lighter structure. But through all these stages there has been a distinct limit to the extent by which the structure is perforated with windows and doors, and the eye has acquired a certain instinct for that just balance between solid and void which satisfies the standards of beauty and at the same time responds to man's instinct for privacy, security and retreat. We go on designing in this way, not because we regard the abstract as the master of practice, but because human experience tends to show that instinctive desire points the way to practical satisfaction.

It is here that the artist so often succeeds where the scientist fails, and it is for that reason that we do well to cultivate a natural taste rather than capitulate to the first logical rule of living that is demonstrated to us.

It would, indeed, be both foolish and ungrateful to infer that science must always be wrong, or even generally wrong, for if our instincts were perfect they would lead us to the very same point at which we should arrive were our knowledge perfect. As neither is perfect, it is the degree of perfection by which these distinct motive forces supplement one another in their direction of human affairs that we are able to approach the truth.

The point that we wish to stress is that science alone is imperfect in all its wonders, and that art must be given a full share in the direction of its course. The voice of logic that appears to confute our natural rules of life, may be uttering a just warning, but for all that it may be a disaster if it is allowed to send much we have held dear the way of all superstitions.

If we were able to peep far into the future, we might well be astonished at the strange places in which men will have chosen to live; but we may be assured that so long as the home retains anything of its present significance; so long as men love to retreat from time to time with their own, away from the world and the weather, so long will the architect continue to express that home in terms not so vastly different from those to which we have grown so accustomed.

It is as well to remember this before we throw over entirely the standards of proportion and the methods of construction that have changed fundamentally so little in the last five hundred years.

NOTES

Park Lane.

It is characteristic of our way of doing things in this country that the transformation of one of our most beautiful residential thoroughfares into a commercial area is before us now as a possibility without any consultation of the opinion of the general public. It would seem that money can lead us anywhere and anyhow, but if Park Lane is to be devoted to a money-making scheme it should at least be dealt with in a dignified and attractive way, and not be at the mercy of harshly outlined flats or purely economic building. The Duke of Westminster has doubtless cogent reasons of his own for allowing such a change in the atmosphere of Park Lane and getting rid of many valuable building sites and houses in which people can no longer afford to live. Transformation may be inevitable, but there is grave doubt whether the requirements are best served by the insertion of shop fronts into the ground-floor stories of these old mansions, and this is apparently all that is contemplated so far as the exteriors are concerned.

London Theatres.

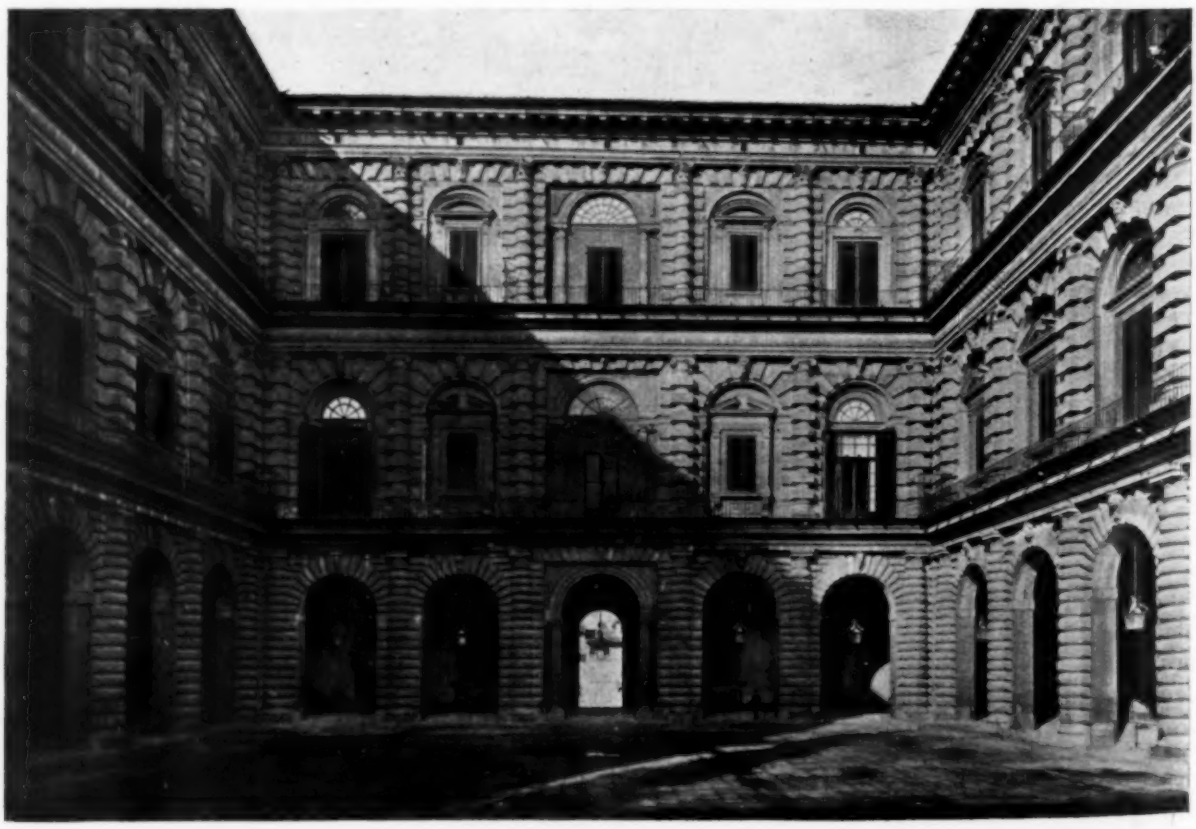
Within the past few months, several projects for new theatres in London have been announced, and it would seem that a serious attempt is at last to be made to provide those modern playhouses the lack of which has long been a reproach to the Metropolis. Many of the theatres of London are completely out of date; they are badly and wastefully planned and it is often quite impossible to obtain a clear view of the stage, even from expensive seats, either because of bad sight lines or obstructions in the form of antiquated pillar supports. The fact is, of course, that many of these buildings were erected long before the days of modern scientific construction. That they should have been allowed to linger on long after their term of relative usefulness has expired seems to argue either a lack of enterprise on the part of those who are responsible for them or a lack of capital to replace them. Both assumptions are apparently wrong, or we should not have this sudden impulse towards theatre building. The real explanation, we take it, is the competition of the cinema. The cinema has set up a new standard of comfort and cheapness, and the pleasure-seeking public will no longer pay a high price for an uncomfortable seat in a playhouse that is in every respect out of date. If the legitimate theatre is to recover the ground which it has lost, it will have to rebuild all its antiquated buildings on modern lines.

New Thames Bridges.

The erection of a new bridge across the Thames has within recent years been an event of rare occurrence, but at the present moment there are no fewer than six projects in view, some of which have been definitely approved. First, there is the recent revival in a revised form of the St. Paul's scheme, the competition for which was won in 1914 by Mr. (now Sir) George Washington Browne; next we have the Charing Cross project; then comes the new bridge for Lambeth, designed by Sir Reginald Blomfield; after which there is the proposed new bridge between Chiswick and Barnes, designed by Sir Herbert Baker, followed by others at Richmond and Hampton Court, designed by Mr. Maxwell Ayrton and Sir Edwin Lutyens respectively. The only rebuildings (Charing Cross being an exceptional project) are those at Lambeth and Hampton Court, and in both cases the loss of the existing bridge will be regretted, if at all, for sentimental reasons only. The steel suspension bridge at Lambeth has long been derelict, while the cast-iron structure at Hampton Court is so extremely ugly that its passing should be regarded in the light of a deliverance. Old Richmond Bridge, a picturesque example of a small stone bridge dating from the late eighteenth century, is, we are glad to note, to be preserved for local traffic. This spurt in bridge building should do much to redeem the reputation of the lower Thames, which is none too well served with bridges, either practically or aesthetically.

Flatford Mill.

Another welcome addition to the possessions of the general public is the Flatford Mill estate, which has been brought about by the generosity of Mr. Chas. Robert Parkington, of Ipswich. Willy Lott's cottage has been restored, the interior of the mill has been converted into studios and workrooms, and the mill-house has been repaired and furnished as a guest-house for artists and students. Besides this, Mr. Parkington has established three scholarships for outdoor landscape painting, which will



Cortile of the Pitti Palace, Florence. (*See pages* 418-419.)

The Shannon Scheme: 110,000-Volt Standard.

(*See page* 432.)

enable the holders to study painting in the place which did so much to inspire Constable.

The Royal Incorporation.

THE quarterly magazine of the Incorporation of Architects in Scotland contains the announcement of the new title of the Association, which will now be the Royal Incorporation of Architects in Scotland. Sir Robert Lorimer, A.R.A., is the president for the present year. The summer issue of the Quarterly contains several interesting sketches by students.

"Hustle."

IN his recent book of essays, "The Savour of Life," Mr. Arnold Bennett has many interesting things to say about the people who are always in a hurry, always running breathlessly after time, always late, and always impeding the activities of other people. "Motion," he says, "which leads nowhere is not life. Breathlessness is not life. Fever is not life. The profuse dissipation of energy is not life." He reopens the subject in another essay on "Hustle," and includes in the meaning of the word the ideas of fussing, pushing, thrusting, and being generally noisy, breathless, and unceremonious—to the laudable end of "getting a move on." "Now I have noticed," he says, "four very marked qualities in all the great workers and doers of my acquaintance. They are never in a hurry; they are never late; they are calm and quiet persons; and they always have time to spare for any job that may turn up unexpectedly. . . . Hence it would appear that hustling is not a necessary accompaniment of genuine and consistent industry. I would go further and say that, if the example of the great workers is worth anything at all, regular hustling is a positive hindrance to accomplishment." With these sentiments we are in entire agreement, and also with the conclusion that it is obvious that nobody can satisfactorily live in a permanent condition of hurry and hustle. Mr. Bennett is under no delusion about the popular deduction that because we hustle we are working too hard. "Hustle is not work, but the enemy of work."

The Architecture of "Hustle."

IN architecture we are concerned with the manifestations of hustle, since many people have mistaken the appearances of hustle (and affected them) in the belief that they were following the god of efficiency. To our thinking, the skyscraper is one of the American architectural manifestations of the ideas associated with hustle. Hence its danger, in this country, to those who innocently suffer for another man's conception of life. If it is the verdict of certain specialists in Harley Street—again to quote Mr. Arnold Bennett—that we are a nation in a state of nerves, we hope that the penalty will be reserved for those who confine the hobby of hustling to themselves.

Empty Houses.

THE recent report that there are from 600 to 800 houses vacant on the new Becontree estate will no doubt produce the usual crop of hasty conclusions, not only about housing schemes, but houses in general. It is not an easy matter to reconcile economic rentals for workmen with the problem of train journeys and distances from work. This, in our opinion, is the crux of the housing question for workpeople employed in a city. It may be—although we doubt it—the only social remedy when industries cannot be brought out to the country and the workpeople. Meantime, no doubt, a class of people not generally identified as workmen, have occupied many of the houses designed for workmen. They have been responsible for handing on to those who ought to know better the foolish stories about the smallness of the houses and the rooms. These houses are answering a purpose for which they were never intended, but they have probably set a standard in density and garden space that will prove a boon to countless generations.

Old Houses, Rouen.

GENERAL NEWS

Professional Announcements.

Mr. Ernest A. Newton, Associate, Manchester Society of Architects, has opened practice at 164, Oxford-road, Manchester. Telephone: Ardwick 3844.

The practice of the late Mr. Ernest H. Wright will be continued by Mr. F. C. Renny, P.A.S.I., and Mrs. B. F. Wright, under the style of "Messrs. Wright and Renny" at Midland Bank Chambers, 1 and 3, Powis Street, Woolwich, London, S.E.18.

New Promenade at Bridlington.

Princess Mary, accompanied by Viscount Lascelles, officially opened the new Bridlington south sea-wall and promenade, which have taken over three years to construct at a cost of £63,694.

A Surveyor's Estate.

Mr. Richard Williams Cowper (82), of Gortamore, Tunstall, Sittingbourne, auctioneer and surveyor, late of Messrs. G. Webb and Co., of Sittingbourne and Maidstone (net personalty £30,739), left £34,466.

Christchurch Priory Amenities.

Land adjacent to the Priory Church has been bought by a Bournemouth building firm for £5,500 from the owner. It is stated that unless a private purchaser is forthcoming the land will be cut up for development.

New Moslem Mosque.

Over £70,000 has been raised by Lord Headley and the British Islamic Society towards a scheme for the purchase of a site and the erection of a Moslem mosque in London. The building will probably accommodate 1,000 persons and the plans will, it is expected, be the subject of a competition.

The Leaning Tower of Pisa.

In order to overcome the objections raised by Italian engineers to the repair of the Leaning Tower of Pisa being entrusted to an English firm, the firm in question has formed an Italian company to carry out the work under their licences and direction. The work has already begun.

Foundling Hospital Site.

An application in connection with the new site for the Foundling Hospital will most likely be made at the Quarter Sessions, to be held at St. Albans on October 2, and on its success depends whether the Foundling Hospital will find its permanent home at Berkhamsted.

A New Open Space in Surrey.

An interesting addition to the properties owned by the National Trust is that of a portion of Hackhurst Downs, which has recently been given to that body by Mr. Beresford Heaton, a former High Sheriff of Surrey. It is between 500 and 600 ft. above sea level, and commands an extensive view, including Leith Hill, Holmbury Hill, and Hindhead.

New Church of All Saints', Beddington.

Lady Cooper has laid the foundation-stone in connection with the Church of All Saints', Beddington Corner, which is one of the new edifices projected under the Bishop of Southwark's Twenty-five Churches Fund. The builders are Messrs. Stanley Ellis, Ltd., Guildford, and the architect is Mr. H. P. Burke Downing, F.S.A., F.R.I.B.A., 12, Little College-street, Westminster Abbey, S.W.

New Canadian Bridge.

The Canadian Pacific Railway has decided to build a great new bridge of fifteen spans and 1,840 feet in length across the Saskatchewan River at Nipawin, near Prince Albert. It will have a sixteen feet wide roadway running below the railway tracks. There will be four spans, two of which will be 278 feet long, and two 280 feet long. They will be carried on reinforced concrete piers.

Newcastle's Civic Buildings.

The Newcastle Corporation Municipal Buildings Special Committee has received the report of Mr. H V. Lanchester, F.R.I.B.A., the expert appointed to assist the committee in the selection of a site for new civic buildings. It is understood that Mr. Lanchester, in his survey of several sites, has favoured the Royal Arcade.

Old Carrington House.

Carrington House, Shepherd-street, Mayfair, has been lately threatened with demolition. The house, which is thought to be about 300 years old, is a stucco-fronted building, with projecting bays, supported by columns at the street level. It has no pretensions to beauty, its chief claim to preservation being that Nelson lived there while planning his great naval campaigns.

By-pass Road Plan.

A proposal is on foot to construct a new Eton by-pass road, to relieve traffic through the narrow Eton High-street and over Windsor Bridge. The road would begin at Salt Hill, Slough, and pass over land beyond the Great Western Railway viaduct to Windsor, skirting Eton. On the Berkshire side of the Thames a new road would cross the Windsor and Maidenhead main road and connect up with the new Imperial road.

Work for Blacksmiths.

The attempt made by the Rural Industries Bureau five years ago to encourage blacksmiths to make domestic ironwork has, it is reported, been successful to a large extent. The Bureau has now begun a photographic record of the work of many blacksmiths in various districts, and this will be published in the form of a catalogue for architects. Examples of the work of these smiths are also being exhibited at most country shows. The Bureau is not advising smiths to devote the whole of their time to this form of ironwork, which, it is suggested, should only be done when there is not enough shoeing of horses and repairing of farm implements to ensure full employment.

Death Watch Beetles in Lead Roof.

During restoration work at Peterborough Cathedral this week the discovery was made that the death watch beetle is capable of attacking lead roofing as well as timber. Lead from the triforium roof at the tower end an eighth of an inch thick was found perforated, the beetles having bored through from the underlying rafters. The borings through wood and lead are in sequence, and beetle wings and remains of grubs have been found in the borings. Grubs in the early beetle stage have been found in the hollows immediately beneath the lead.

The belief that beetles could bore through lead has been long entertained, and the discovery at the cathedral affords ample corroboration. Specimens are being sent to the British Museum (Natural History) at South Kensington.

Town Planning.

The following progress in town planning in England and Wales for the month ended August 31, 1928, is recorded by the Town Planning Department of the Ministry of Health:—

Preliminary Statements approved (Stage BB):—

Cornwall: Newquay U.D.C.; Hertfordshire: Rickmansworth U.D.C.; Kent: Sidcup U.D.C.

Preliminary Statements submitted (Stage B):—

Middlesex: Uxbridge U.D.C., Wembley U.D.C. (No. 2); Staffordshire: Stoke-on-Trent T.C. (Eastern No. 2).

Resolutions received (Stage A):—

Shropshire: Shrewsbury T.C.; Sussex: Eastbourne T.C. (additional area); Yorkshire (W.R.): Todmorden T.C.; Wales, Glamorgan: Barry U.D.C.

COMPETITION NEWS

Lewisham Town Hall Extension Competition.

The assessor in this competition, Mr. F. Winton Newman, F.R.I.B.A., has made his award as follows:—

First (premium £350 to merge with fees): Messrs. Bradshaw Gass & Hope.

Second (premium £250): Messrs. Davidge & Rose.

Third (premium £150): Messrs. Cox & Winslade.

The premiated designs will be exhibited in the Council Chamber at Lewisham.

Town Hall, Municipal Buildings, and Art Gallery, Southampton.

The assessor in this competition, Mr. H. Austen Hall, F.R.I.B.A., has made his award as follows:—1st (premium £500): Mr. E. Berry Webber, F.R.I.B.A. (London). 2nd (premium £300): Messrs. Crouch, Butler & Savage, FF.R.I.B.A. (Birmingham). 3rd (premium £150): Messrs. Edward Douglas Lyons and Thomas E. North (London). Forty-seven sets of designs were sent in. They will be on view at Southampton from September 17 to September 24 inclusive.

R.I.B.A. Garage Competition.

The attention of the assessors has been called to references in the Press to the R.I.B.A. competition for a design for a garage in the theatre area of London. The assessors wish to point out:—(1) That the whole competition is hypothetical; (2) That there is no intention on the part of the R.I.B.A. to convey the impression that the building will be executed; (3) That the designs and drawings will remain the property of the competitors. The site is purposely left indefinite so as to give full scope for new ideas on this interesting subject.

Columbus Memorial Lighthouse, Dominica.

We have received, in the form of a book, further details of the conditions and scheme of this memorial — first announced in *The Builder* for March 2. The lighthouse, which will be erected on the coast of the Dominican Republic, will be carried out under the control of the Permanent Committee of the Governing Board of the Pan-American Union. An international jury of three will select ten designs, the authors of which will each receive £400. These winners will then re-compete for the final award.

In the second competition £2,000 will be paid to the author whose design is placed first, who will be declared the architect of the lighthouse; £1,500 to the design placed second; £1,000 to that placed third; £500 to the one placed fourth; and £200 to each of the other six competitors. In the first stage of the competition the architects will be surrounded with a minimum of restrictions, the competitor being allowed the utmost freedom to express himself. The only mandatory requirements are that the memorial shall stand on a mound, or terrace or terraces, about 40 ft. high, in order that its base may be visible over the tree-tops from every direction; that the structure shall contain a chapel large enough to receive the Columbus Monument now in the Cathedral at Santo Domingo; that a museum be provided either as part of the chapel, or elsewhere, to contain such appropriate relics as may become available over a long term of years; that it shall support at least one great lantern. It is further suggested that the total height of the monument should not exceed 600 ft.; and that it be constructed on a properly protected structural steel frame of reinforced concrete. In addition, the competitors are requested to indicate a comprehensive development of the 2,500 acre tract which will be set aside for the monument and adjacent park, providing for an official and residential centre and for an airport measuring at least 2,000 by 3,000 ft., and with a runway about a mile long, indicating a mooring-mast, hangars, repair shops, etc.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Charing Cross Bridge.

SIR,—The difficulty presented by the tramways in connection with a low level bridge at Charing Cross referred to by Mr. Cameron in his letter of September 7 has been met in two and possibly more schemes for the bridge prepared by architects. The existing buildings are far enough from the bridge head on the Embankment to enable the general level to be raised some few feet, and the District Railway is deep enough below the road to allow the tramways to be lowered, so that while the new bridge will deliver on to the raised Embankment level, the trams will pass under it, and this is to be done without in any way disturbing the present footway and parapet. Not only would the trams pass under the bridge, but the general traffic also, and while it would be possible for vehicles to get on to the bridge from the Embankment, there would be no interference with the immensely heavy stream of general traffic along the Embankment.

Apart from the architectural value of a low level scheme, there is an important advantage secured by enabling traffic to drain away in various directions instead of concentrating it on one spot. A high-level bridge comes to ground at a long distance from the river and gives no access to the intermediate streets, but a bridge on the low level, such as Westminster or Blackfriars bridges, serves the whole district down to the water's edge and distributes the traffic from the bridge in many directions at once. In the case of the hotel traffic in the Charing Cross district, this would be an immense advantage.

ARTHUR KEEN.

Is the Architectural Profession Overcrowded?

SIR,—The debate between "Positive" and "Negative" appears to be very inconclusive, and chiefly because their points of view are very divergent. "Positive" recognises that very few guardians would pay a substantial premium, or fees, in education extending over five or six years, if it were realised that there was only a remote chance of the student, at the end of his training, being able to earn more than a badly-paid typist. He indulges in some pleasant and rather cynical platitudes and ends up with the assumption that it is merely a few men of doubtful ability who suffer from pecuniary difficulties; in essence he says: "*I* am all right, and it is a very nice world."

Now, granting the correctness of what "Positive" suggests should be the case—that no man should enter the profession except with the view to practise—it is patent that the profession is grossly overcrowded. But, on the other hand, if enthusiasts in their anxiety that architecture shall be worthy of the name, acquire their expensive training with a view to assisting all sorts of unqualified practitioners to turn out designs cheaply and briskly and so earn for themselves a reputation as energetic and practical architects, I think we may agree that the overcrowding is not so marked.

If we turn to the list of contracts under consideration, as announced in your pages, it is surprising how few applications have to be made to architects. County architects, county engineers, district surveyors, borough surveyors, and other officials paid out of rates and taxes, to which architects subscribe their quota, seem to mop up nearly everything worth having. In addition to these, there are a comparatively small circle of architects who automatically get the work of big firms, though often, in seeing the buildings erected, one wonders at the tenacity of the clients. Then, again, there are a number, whose name we may call legion, who, with architecture as a side-line to house agency, auctioneering, or, in fact, any other business, manage to secure quite a large proportion of work, especially where alterations are concerned. These last are tied by no conventions and, as a rule, appear to thrive as well as or better than the younger members of the profession who are protected by their institutions.

I cannot refrain from asking, as I have often asked myself, how far are the R.I.B.A. and its allied societies responsible for this state of affairs? To look back forty years, when I was comparatively young and when the question of registration was being discussed, it then seemed to me that the obvious thing to do was that every person in practice as an architect, or who had commenced to serve his indentures to an architect, should be entitled to be registered, any addition to the list being regulated, first by apprenticeship to a qualified practitioner of not less than, say, five years' practice, and then by a qualifying examination of such a description as would show that the person calling himself a registered architect could safely erect buildings. Fuller qualifications and distinctions would be shown by the architectural societies or institutions to which a practitioner belonged, and it would be for the public to learn to differentiate between the architect who was merely registered or the practitioner whose diploma showed that he was a highly qualified constructionist or extremely artistic.

Had this been done at the time, and had there not been so much bickering between rival societies who considered their dignity before the ultimate good of architecture, the Bill would have passed without opposition, and things to-day would have been very different. That opportunity was hopelessly lost, but another and unique chance of serving the profession presented itself 14 years ago, though perhaps this will not be generally admitted. I think I may postulate that a Council or Committee who are to safeguard effectually the interests of any large corporation, whether of labour, business, science or art, should, first and foremost, be far-sighted, businesslike, and swift to take the initiative.

Now, at the period with which I am dealing, it was obvious to the ordinary man in the street that before very long there was going to be a world-war, in which England would be actively engaged. It would also have been obvious to the ideal council that I have imagined that there would be a big dislocation in ordinary civil architecture, but, at the same time, an enormous amount of emergency work, both at home and abroad, with regard to roads, bridges, and buildings for military operations, and that those who should deal with this crisis should be the men who had been trained and knew their job. It was not necessary to wait for the cataclysm; a comprehensive scheme should have been prepared whereby all civil engineers, architects, surveyors and builders above military age could have been classified and ready for any emergency. Had this been done, a great deal of national confusion would have been saved, there would have been fewer "square pegs in round holes," an enormous pecuniary saving would have been effected for the country, and the combined professions would have gained in prestige instead of individual members having their services exploited and unrecognised. Having once secured the reins, the bureaucracies kept a firm grip, and no sooner was peace declared than the country was flooded with literature about housing and ridiculous pamphlets at the public expense on how to build cottages of the simplest type.

I might continue to cross my "t's" and dot my "i's," but the readers of your journal will easily be able to follow my train of thought to its dingy terminus. It is scarcely necessary for me to add that I think that as a means of earning a liberal income the profession is grossly overcrowded.

G. L. W. B.

SIR,—It seems to me that though overcrowding is at present rampant, it is not from natural causes, but merely an artificial state forced on the profession by the "trade-union leaders" at Conduit-street.

According to the Ministry of Health figures, 240,000 houses were built during the last completed year. How many of these were designed by "chartered architects"? It would appear that housing alone would absorb a large number of surplus men if chartered architects were allowed to accept "economic" fees and were not tied down to the "Harley-street" scale of 6 per cent. to 10 per cent.

It is ridiculous to contend that architects cannot work for less than 6 per cent. Under the present competition system we have dozens of men preparing sketch schemes and estimates in order that one may draw 6 per cent. Take the case of a competition attracting 30 entrants. Each man does work for which—under the R.I.B.A. scale—he would be compelled to charge a private client 2 per cent. on the cost of building. In other words, the profession, as a whole, does 30 × 2 per cent. = 60 per cent. of work in order that one man may draw 6 per cent. and, say, two others small premiums. Why is such a system tolerated by a profession which holds out for a minimum of 6 per cent. on completed buildings and 2 per cent. on sketch schemes?

The "Fellows" appear to have adopted the views of Communists in other callings and are demanding minimum fees for their own services, regardless of the ability of the industry to pay them. If they were genuine in their "trade-unionism" they would also demand minimum wages for salaried architects, but this they refuse to do.

The whole trouble seems to be due to the fact that the R.I.B.A. is run for the benefit of one class alone—the practising architect—and that the Council dictates the whole policy of the profession without a "ballot" of any sort.

Two Registration Bills have been brought before Parliament without a ballot of any kind, and a measure for minimum salaries has been turned down by the Council. Yet the machinery for a referendum exists.

To my mind, we shall never make any real progress until such time as the Institute is run on constitutional lines and its Council formed by "proportional representation." At present, in a Council of 65, only 15 seats are reserved for the Associates and Licentiates combined, yet there are 4,600 Associates and Licentiates and but 1,400 Fellows. These Fellows at present dictate the whole policy of the profession, with a total disregard of the interests of the majority of members—the salaried architects—who subscribe so large a proportion of the funds.

B.M./Z.F.H.X., L.R.I.B.A.

Exeter Improvement Scheme.

A large scheme of development, which will cost £500,000, has been approved by the Exeter City Council. The street improvements, which form the principal part of the plans, are estimated to cost £199,000; the new sewage disposal scheme will cost about £140,000; a housing scheme, to provide 428 houses, will absorb £182,000; and a municipal omnibus service, for which sanction was obtained from Parliament last session, will cost £18,000. Last autumn the City Council put forward an elaborate scheme for the relief of traffic congestion. There were, however, fears for the safety of some of the architectural treasures of the city, and the opposition of the ratepayers became so strong that the proposals had to be abandoned completely. They have now been entirely remodelled, and it is claimed that the new developments, while conforming to modern traffic requirements, will not interfere with historic Exeter, and, in particular, will protect the High-street from further vandalism.

ITALIAN STONEWORK—II

By F. E. BENNETT, A.R.I.B.A.

STUDIED in detail, the work of Sanmicheli in and around Verona (mention of which was made in the previous article) is well rewarded, for it provides many a bright surprise. In so many ways the assurance of the designer, with his freshness of ideas, shows itself. He gives ideas which are so valuable at the present day when the complications of planning demand a facility to introduce more and more freedom into the handling of classic elements.

The truncation of a doric entablature indicated in Fig. 4 is drastic, but it is quite consciously so and avoids being clumsy, and the ornamentation of the ovolo moulding when seen in stonework is delightful.

Fig. 5 is an example of one of Sanmicheli's compositions indicated nakedly as solid and void.

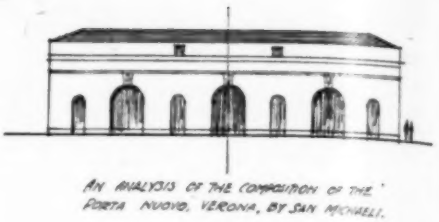
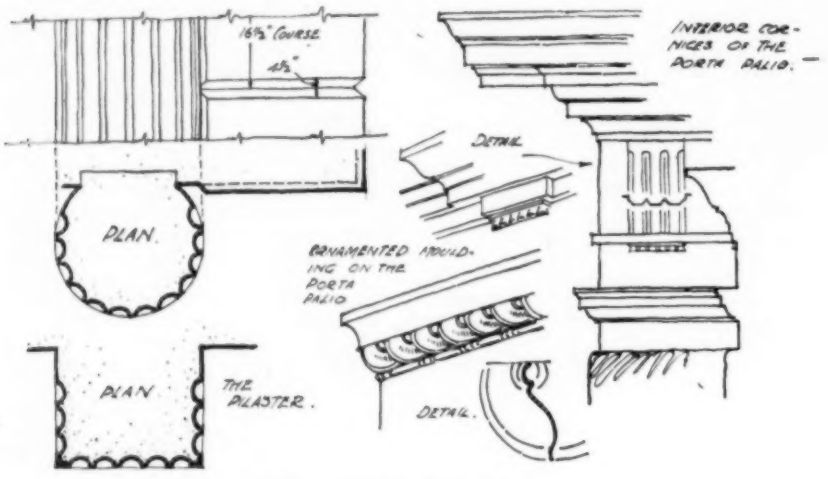


FIG. 5.



DETAILS OF THE STONEWORK OF THE PORTA PALIO AT VERONA, BY SAN MICHAELI.

FIG. 4.

Rome.

The characteristics of stonework in Rome are not clearly definable, as there are so many periods of architecture to be seen jostling one another within the boundaries of the one city.

As monuments to the great age of the city, the remains of the lusty classic work stand here and there in ruins, carefully railed in and attended; but forming the great bulk of buildings are the Renaissance palaces and the palace-like buildings erected since on the same lines.

The stonework of the Renaissance palaces in Rome is characterised by the accuracy and evenness of its cutting. Considered in this respect, stonework is seen to run concurrently with architecture. In the beginning, when the ancient Roman work was rough and ready, designed on big lines and carried out by methods of standardised labour, the cutting and jointing of stones was affected in the same spirit, with blocks approximately squared and mortar freely relied on to make up deficiencies, but by the time the classic idea had blossomed out and reached the culmination of its Renaissance in buildings like the Cancellaria Palace, by Bramanti, in Rome, accuracy of cutting and jointing had also reached its highest point of perfection. The earlier idea of fortification is gone, the desire to express power is restrained, and there is no exaggerated rustication. The remodelled classic elements are completely developed, and used with the utmost grace and precision, the Gothic qualities which went to make up the Florentine palaces being quite suppressed. All walling stonework is smooth-finished, the ground floor taking on a more restrained form. The courses are of equal height, the grooves of the joints are regular, and vertical joints maintain alignment. On the *piano nobile*, or first floor, the exterior stonework is carried to its highest state of refinement, the arch and lintel being most perfectly combined and the most excellent carving being delicately applied to surfaces which are suitable to receive it.

It is interesting to notice the design of the Rucellai Palace at Florence, by Alberti, which, being the first Renaissance building of its kind, more or less anticipated the final development, but the illustration of a portion of it shows how disfiguring irregular jointing can be in a design which sets out to be academic and scholarly in all its detail. This irregularity of the sunk joints detracts very much from the carving. (See Fig 6.)

It is difficult to believe that Renaissance architects took stone from old Roman buildings to use in their new buildings, yet it is true. This form of thieving apparently went on even in the seventeenth century, for it is said that Bernini took metal from the Pantheon to erect his brazen baldachino at the crossing of St. Peter's.

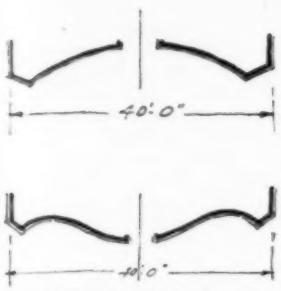
The Rome of to-day has become a city of stone combined with stucco—indeed, these already form the facing material of the great majority of the buildings. It seems that, while the stone palaces of the sixteenth century have set the basis of style of design for nearly all buildings since, the comparative lack of wealth has brought about the use of stucco on main wall surfaces instead of the complete use of expensive stonework as of old. Stonework is still used for the rusticated surrounds of main entrances and certain details, but the main wall surfaces are nearly all plastered over, especially in the great majority of city houses.

Of colour effects obtained by contrasting materials many varieties are to be seen. The most popular scheme is the traditional one of blue-grey stone with plaster tinted a rich umber colour, which has an effect of deep gold when the sun is shining on it. Other colours for plaster vary from pale yellow or cream to deep red-brown, and the stone may be a pale yellowish or straw colour instead of the cooler green-grey. Just as with the use of colour in other materials in Italy, tones must be strong and the colours rich to stand up against the glare of the sun's rays.

The Baroque in Rome.

In Rome there are some 200 churches, and the extraordinary fact is that about nine-tenths of them are Baroque, the other tenth being more or less pure Renaissance. (Of Gothic there appears to be nothing but a detail here and there.) Among these many Baroque churches, the most amazing things were done in the way of stonework. Pediments and all other complete forms that could be broken, were broken, and any straight lines that could be curved or twisted, were twisted. As most of the churches were crowded in among the city

FIG. 6.
Rucellai Palace, Florence: Detail of Elevation at First Floor.
ALBERTI, Architect.



PLANS OF BAROQUE CHURCH FACADES.

FIGS. 7 & 8.

buildings, and more or less enclosed on three sides, the main fronts received particular attention. Quite the normal thing to do with this front was to give it a concave curve on plan, as in Fig. 7, and this without any apparent reason whatever, and without any regard to the other sides of the square on which it faced. In one example in Rome a church façade is disposed on a three-way curve, as in Fig. 8, although the front is only about forty feet wide. These façades, commencing with their exotic shapes, are then elaborately treated with pilasters and columns, elaborate and licentious door and window surrounds, and then finished off with frenzied pieces of cornice, turrets, floating figures and carved excrescences, altogether producing an effect most lively and theatrical.

The Baroque, of course, is the definite mark of the decline of the Renaissance in Italy, but while it displays such inadequate sense of scale and such frequent vulgarity of detail, as a style it has a very great deal of interest. The pure and grand manner of the earlier masters, while producing palaces of the first rank as works of art, was apt to have a deadening influence on the smaller and more economical buildings which followed after. By striving to attain to the quality of the palace, the smaller buildings lose the wit or humour they might have. They are not cut according to their cloth; they look plain, prudish and middle class, whereas a little Baroque nicely introduced would probably give them just that amount of character they want.

The Pitti Palace.

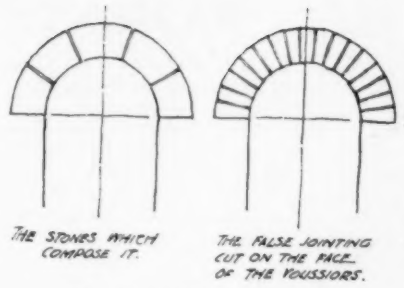
The first impression conveyed on seeing the outside of this building at Florence, is of a rugged cliff. Photographs of it do not convey an adequate impression of the ruggedness of its stonework, of the boldness of its massing, how the walling of the façade consists of massive stones, carefully coursed and jointed but projecting forward from their beds in rough-hewn, uneven bulges. And then the windows of accurately carved ashlar work are set at regular intervals along each floor like jewels in a rough ground work. The idea of grandiose stonework as an expression of wealth and power embodied in the Riccardi and Strozzi Palaces is advanced still further in the Pitti Palace, where it reaches what may be reasonably considered the limit of that idea. The extravagance of this building and its enormous scale would make any modern building on the same lines quite unreasonable and practically useless, except as a museum (the use to which this building is now actually put).

The cortile, while of a very different design (see page 414) maintains the character of the front elevation—the character of maximum stonework effect. On three sides of a square there are three complete stories of superimposed three-quarter columns and entablatures, and all the columns are completely bedded in heavy rustics. It is as if the delicate orders had been carefully padded in cotton wool for protection, with the result that instead of expressing the more personal and intimate life of the palace, as it should, the cortile seems to be hot and stuffy. No doubt the designer was unable to clear his mind of the inspiration which prompted the design of the exterior, and he carried far too much of its chunkiness to the inner court. The effect, while most decidedly impressive, cannot be ranked æsthetically with other and more delicate cortiles to be found in the palaces of the period. There seems to have been a glorying in the massing up of stonework merely for the joy of doing it—for the joy of undertaking vast building enterprise, of organising big labour parties, of producing great efforts, of painfully wresting the cumbersome rock from out of the soil.

Contrasting so strongly with the heavy rusticated and simplicity of the outer façades of the Florentine palaces, some inner cortiles and loggias of the city are conspicuous examples of delicate stonework. This is specially true of the loggia of the Innocenti, which is even as frail in form as late Gothic stonework, and yet retains that sufficient character of firmness which the material demands.

The use of stone in buildings did not stop with the exteriors and the cortiles and loggias. Still, it was carried inside to form vaults, partition walls, vaulted staircases, floors, door surrounds and other decorations. Sometimes the walls, which were invariably very thick, remained uncovered inside.

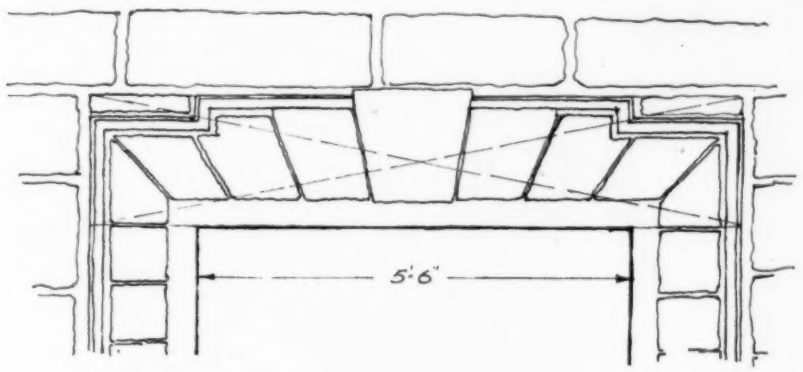
In the Italian Renaissance period, while stone as a material was elevated to the grandest of uses, it suffered indignity in respect of its natural form, for the architects of the period being, as they often were, painters of considerable ability, were more concerned with the finished effect of their buildings as works of art than with



THE FLORENTINE ARCH.

FIG. 10.

ideals of structural truth. They had got away from the Gothic practice of moulding and finishing each stone in the workshop before laying it on the job, and now placed the stone directly into the building to be carved *in situ*, by this means avoiding expense and the necessity to make the jointing accord with the various architectural features. Resulting from this, one sees examples, as in Figs. 9, 10, 11 and 12. From the point of view of the honest use of stones, these are grave faults, and yet common in the Florentine palaces. They give quite a false representation of the nature—or rather size—of the material used. No doubt the desire to indicate small stones in the arch is due to the Gothic influence, bearing in mind how the unavoidable use of small stones dominated Gothic construction. But here in Florence the smallness of stones was a factor which did not exist. Rather it seems that stones of large size were easy to obtain from the quarries, and the employment of small stones in a façade was by way of being a luxury, owing to the amount of cutting which they required.

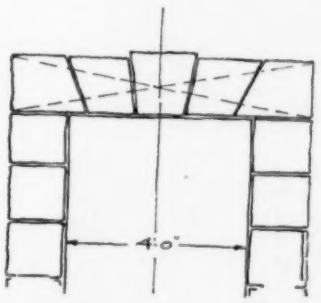


FALSE ARCH OVER WINDOW IN THE PALAZZO PAZZI. FLORENCE. THE OPENING IS SPANNED WITH ONE LARGE LINTOL AND THE FALSE JOINTING CARVED IN SITU.

Fig. 11.

FALSE JOINTING ON THE LINTOL OF A WINDOW OPENING IN FLORENCE.

FIG. 9.



FLAT ARCH JOINTING CUT IN A LINTOL OVER WINDOW OPG. IN FLORENCE.

FIG. 12.

ILLUSTRATIONS

PLATES

Convocation Hall, University of Rangoon.

This building is a termination of a campus which runs between the halls and various college buildings now in course of erection. The accommodation is for 2,000, exclusive of the dais. The building is of steel construction, with brick panels and hard white plaster finish. Special attention has been given to acoustics. The panelling is hard Burmese decorative woods.

Mr. T. O. Foster, F.R.I.B.A., is the architect.

Judson College, University of Rangoon.

This building faces the larger University College building on the other side of the campus. Mr. T. O. Foster, F.R.I.B.A., is the architect.

Keats Close, Hampstead.

In this development of a site adjoining Keats Memorial House at Keats Grove, Hampstead, an attempt has been made to preserve the old-world character of the neighbourhood and to make the most of a somewhat difficult site. The accommodation of each house provides for a staircase, hall, and lavatory, two living-rooms, kitchen, etc., four bedrooms, with bathroom, etc. Every endeavour has been made to provide labour-saving fitments throughout, with wash-basins in the bedrooms. The houses are faced with silver-grey bricks and cherry-red facings. The roofs are covered with pantiles. The general contractors were Messrs. W. Walkendine, Ltd., of London and Derby, and the sub-contractors were as follows:—J. Boulting and Sons, heating and hot-water works; Duncan Watson and Co., electrical work; Dent and Hellyer, Ltd., sanitary work; T. Elsley, Ltd., ironwork.

Messrs. Constantine and Vernon, F. and A.R.I.B.A., are the architects.

Lewisham Town Hall Competition.

The assessor's award in this competition is given under Competition News, page 416, and extracts from his report appear on page 433. We illustrate this week the first and second premiated designs by Messrs. Bradshaw Gass and Hope, FF.R.I.B.A., and Messrs. Davidge and Rose, respectively.

House at Pachesham Park Estate, Leatherhead.

This house has been erected on a portion of an estate which originally belonged to a mansion. The site is a little over an acre in extent, and is bordered on the west by a lake. The plan of the house, therefore, resolved itself into the problem of attaining the best possible prospect, combined with proper aspect. The house is built of local wirecut bricks, covered with cement rendering finished "Atlas White." The roof is covered with Roman tiles, with wide overhanging eaves. The elevation has been designed to comply with the clients' requirements to combine the appearance of an Italianate villa with English characteristics. The builder was Mr. R. L. Coombs, of Hampstead Way and Pachesham Park, and the sub-contractors were as follows:—Halls, of Croydon, roofing; Henry Hope and Sons, Ltd., steel windows; Adamite Co., "Atlas White" cement.

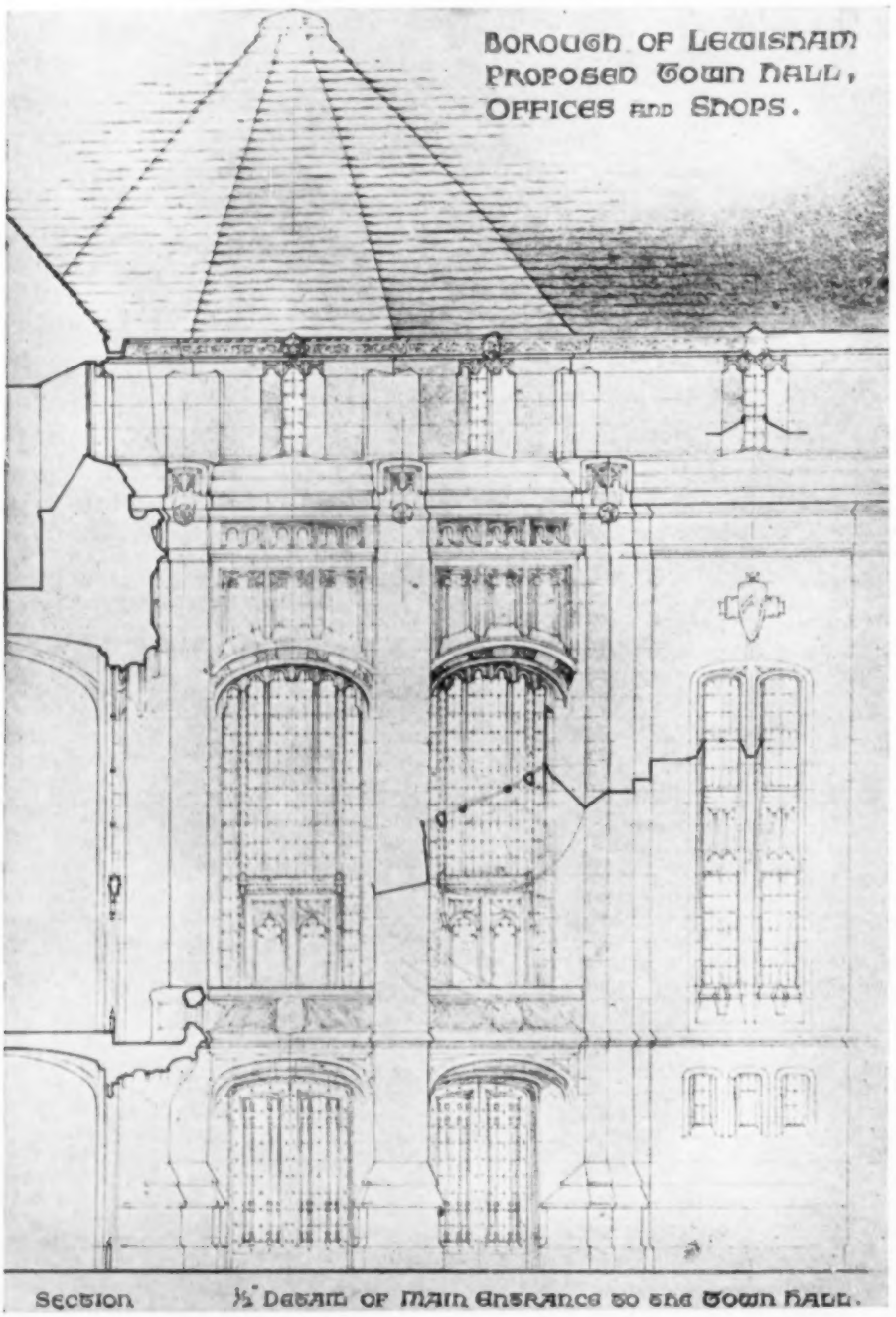
Messrs. W. E. Riley and Glanfield, FF.R.I.B.A., are the architects.

Housing Competition, Mount Merrion Park, Dublin.

The results in this competition were given in our issue for August 17, and we now illustrate the first premiated designs in two categories, A and D. The former was for a house to cost £1,500, and the winners are Messrs. Donnelly, Moore and Keatinge, of Dublin. In the latter case the house was to cost £800, and the winner is Mr. Arnold F. Hendy, of Dublin.

The Hall, Rhodes House, Oxford.

The illustration given on our frontispiece shows the dignified hall of Rhodes House, the new headquarters for overseas students at Oxford, for which Sir Herbert Baker, A.R.A., F.R.I.B.A., is the architect.



Lewisham Town Hall Extension Competition; First Premiated Design.
MESSRS. BRADSHAW GASS & HOPE, FF.R.I.B.A., Architects.

NEW CINEMAS

Plans have been passed by the Dundee Dean of Guild Court for a cinema to be erected in Forrest Park-place, Dundee, for Mr. Charles Gray.

Mr. R. B. Derham, the Winter Gardens, Blackpool, Lancs, is the architect for the new combination theatre and cinema which is to be erected on the west side of Dalton-square, Lancaster, at the estimated cost of £20,000. Mr. Derham—who has left England for a flying visit to New York—was formerly assistant to Mr. Bertie Crewe.

A new cinema is proposed to be erected in New-street, Birmingham, for the Savoy Cinemas, Ltd. Plans are being prepared by Mr. F. C. Mitchell, architect, of 80, George-street, Portman-square, London, W.1.

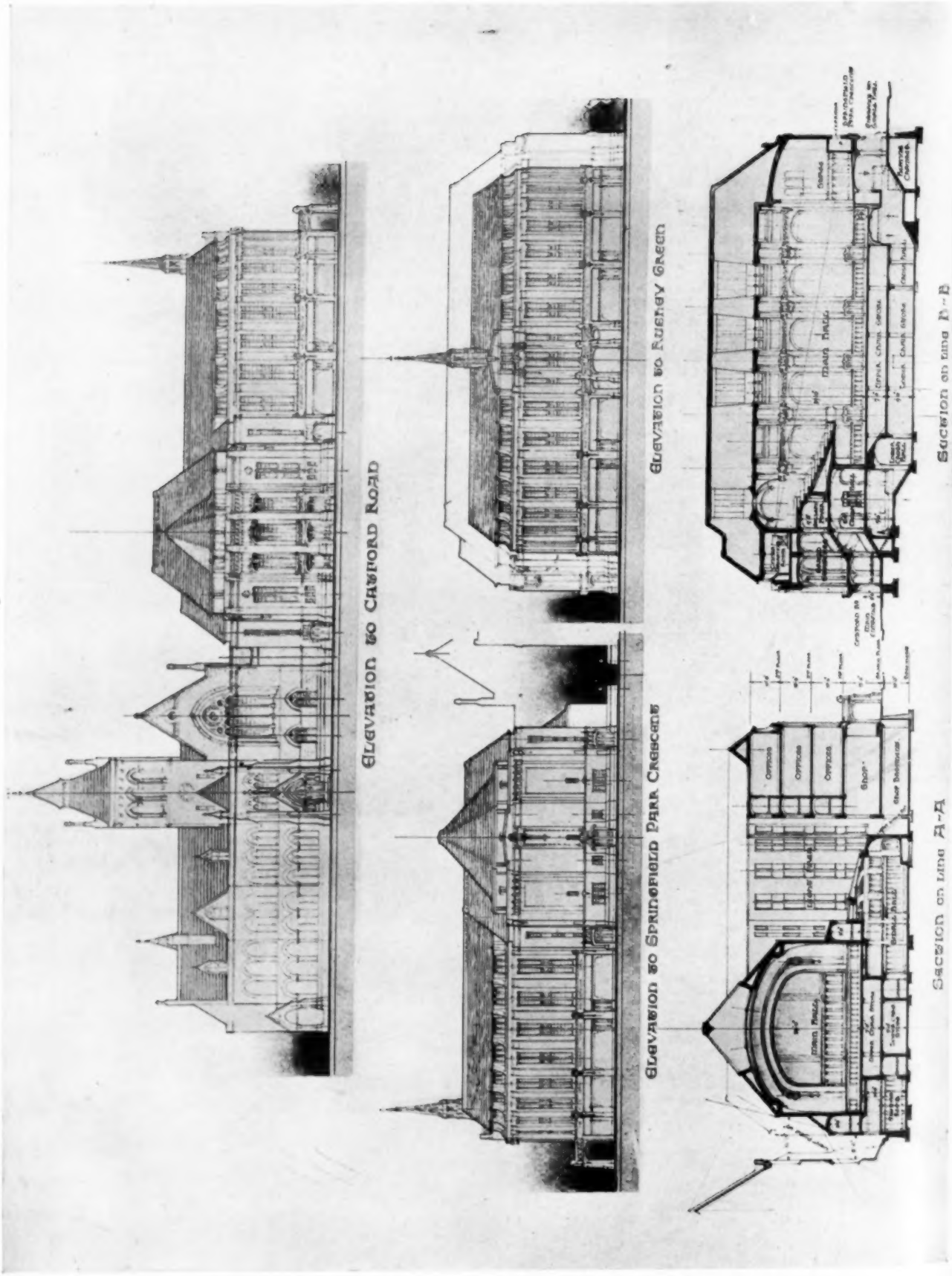
Mr. Horace G. Bradley, 10A, Temple-row, Birmingham, is preparing plans for the erection of an up-to-date cinema on the Coliseum site. The new building will have seating accommodation for about 1,300. Mr. F. Hewitson, of the Prince's Hall, Smethwick, is the promoter.

A new cinema theatre is to be erected in Russell-street to accommodate 1,500 persons. The architects are Messrs. H. S. Dixon and Bell, Pearl-buildings, Northumberland-street, Newcastle-upon-Tyne.

The Theatres and Public Entertainments Committee of the Liverpool Justices has sanctioned plans for the erection of a cinema theatre to hold 1,500 people, on the site 1-1A, Overton-street, Edge Hill. Mr. Dudley West, chartered accountant, is to be secretary to a private company to be formed for the purpose of running the scheme. It is understood that the theatre is to cost about £20,000.

Offa's Dyke.

A discovery concerning Offa's Dyke, the entrenchment along the Welsh border said to have been built by Offa a few years after 765 to keep the Welsh back, has been made by Dr. Cyril Fox, Director of the National Museum of Wales. Dr. Fox, who is engaged on a detailed survey of the Dyke which is expected to occupy another ten years, has established the fact that defences of the Lancaut Peninsula on the River Wye north of Chepstow are not a continuation of the Dyke, as supposed, but a prehistoric promontory fortress, probably 1,000 years older.

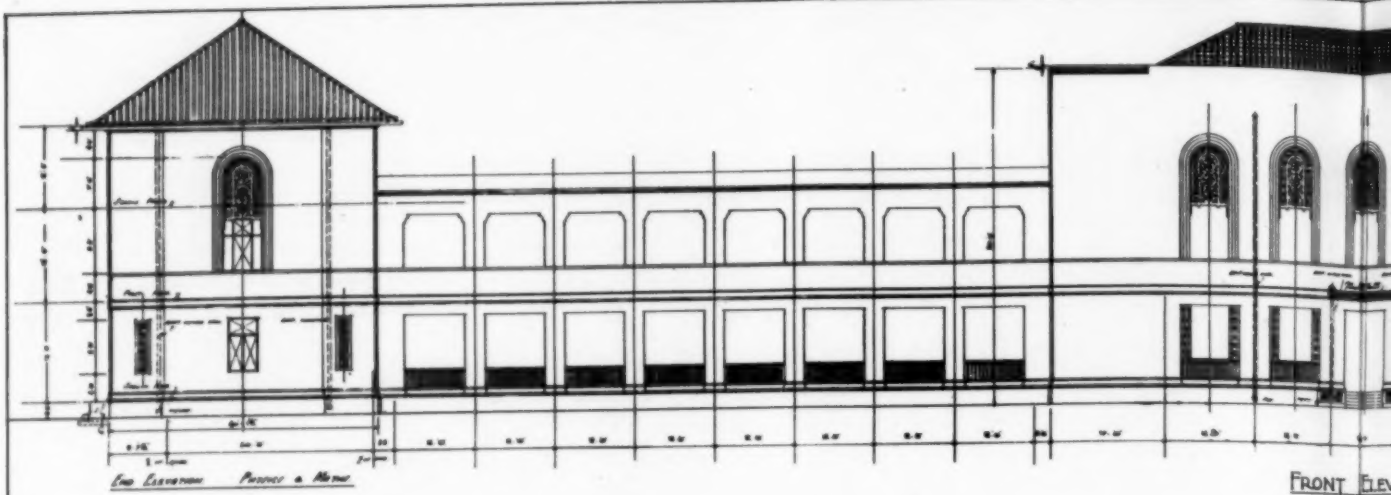

Elevation to Crawford Road
Elevation to Rushey Green
Elevation to Springfield Park Crescent
Section on line B-B
Section on line A-A

Lewisham Town Hall Extension Competition : First Premiated Design.

Messrs. Bradshaw Gass & Hope, F.F.R.I.B.A., Architects.

Rowhedge Town Hall Extension Competition: First Premiated Design.

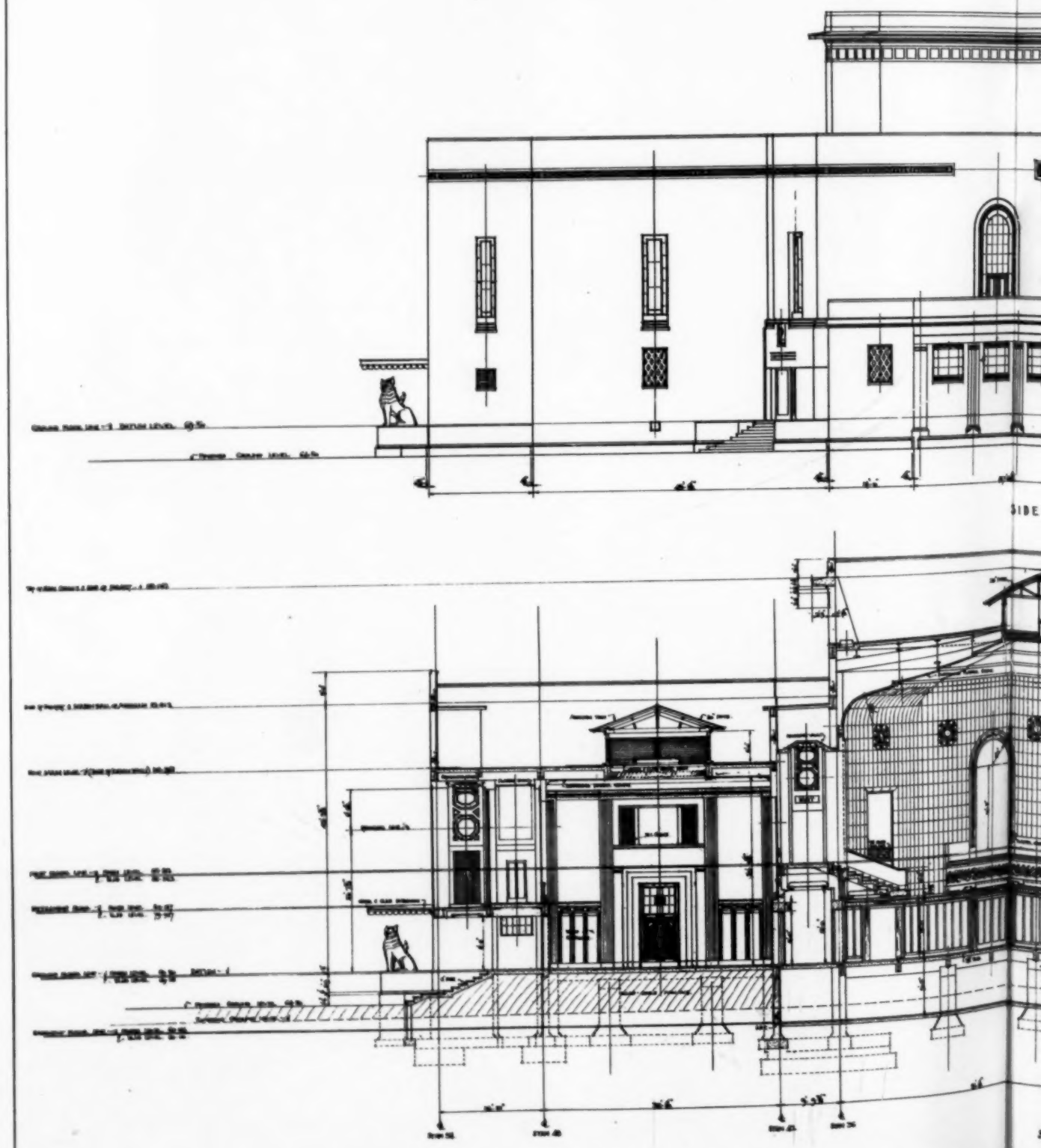
MESSRS. BRADSHAW GASS & HOPE, FF.R.I.B.A., Architects.



End Elevation Facing a Mirror

FRONT ELEV

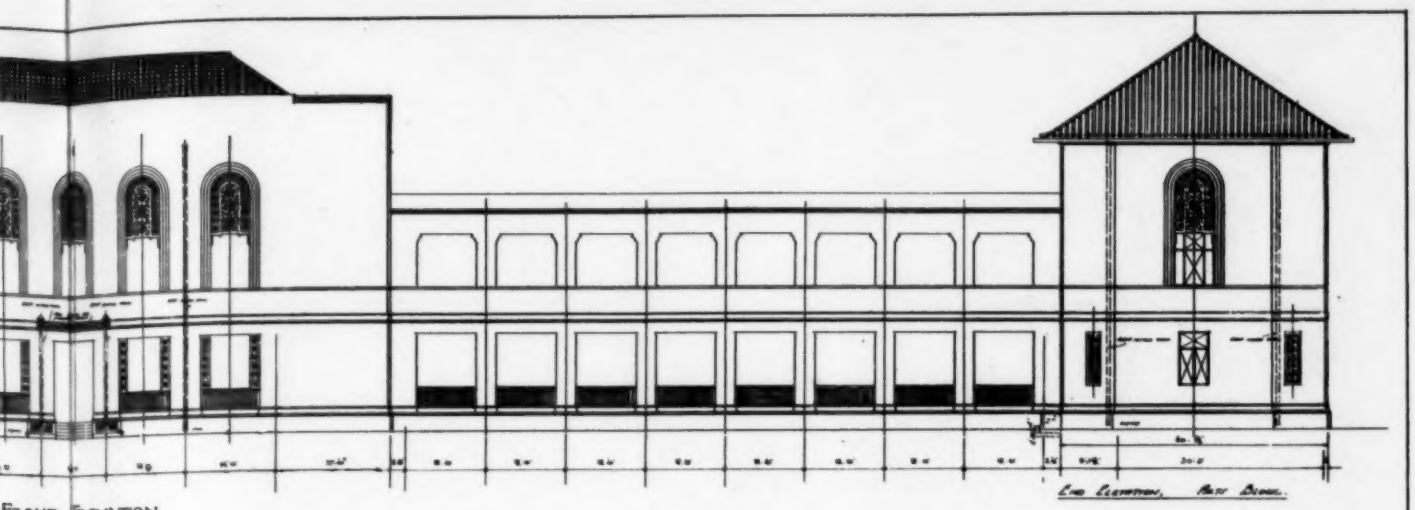
Judson Colleg



SIDE

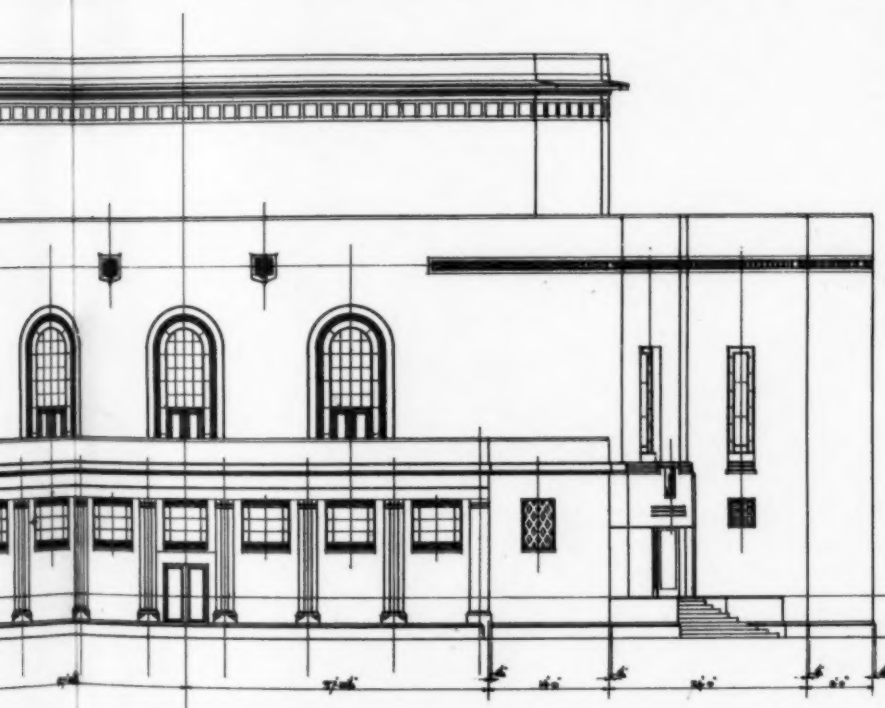
Convocation Hall.

RANGOON UNIVERSITY. Mr. T. G. Fost



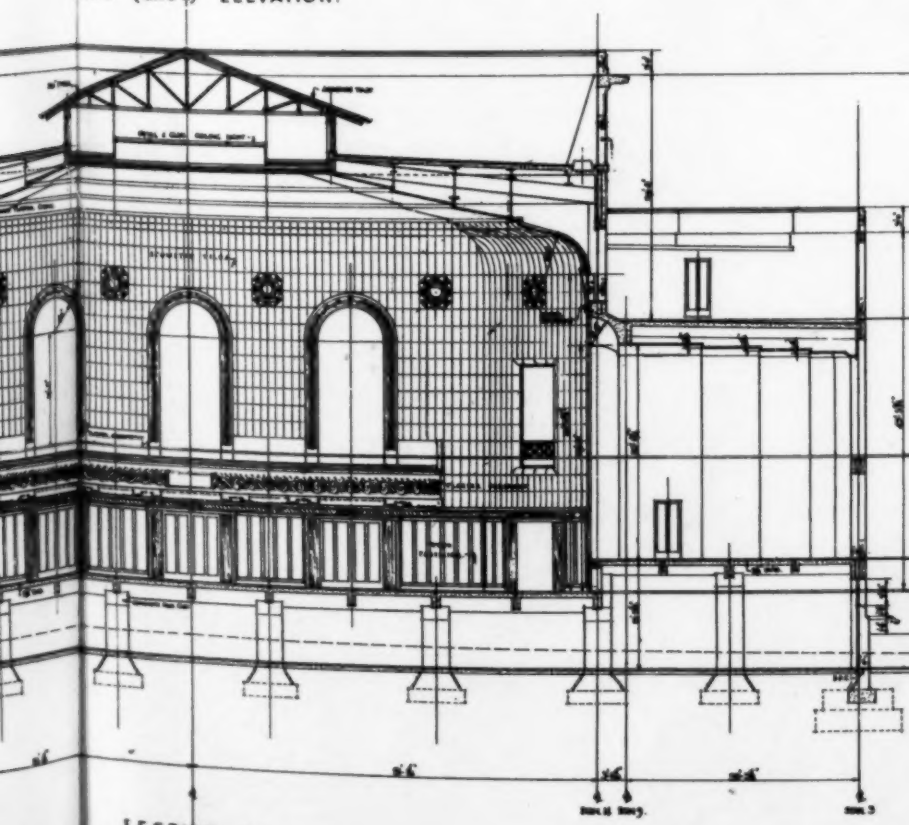
FRONT ELEVATION.

Judson College.



SIDE (EAST) ELEVATION.

NOTES.
FOR SIZES OF ALL STEELWORK SEE ENGINEERS DRAWINGS.
FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS
ALL DIMENSIONS ARE BRICK SIZES EXCEPT WHERE OTHERWISE STATED.

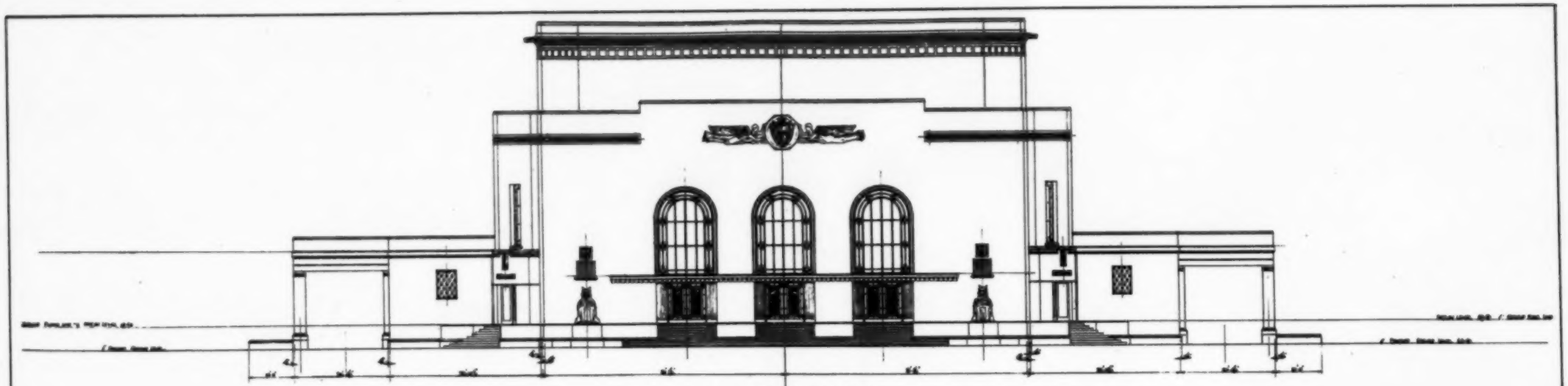


SECTION A.A.

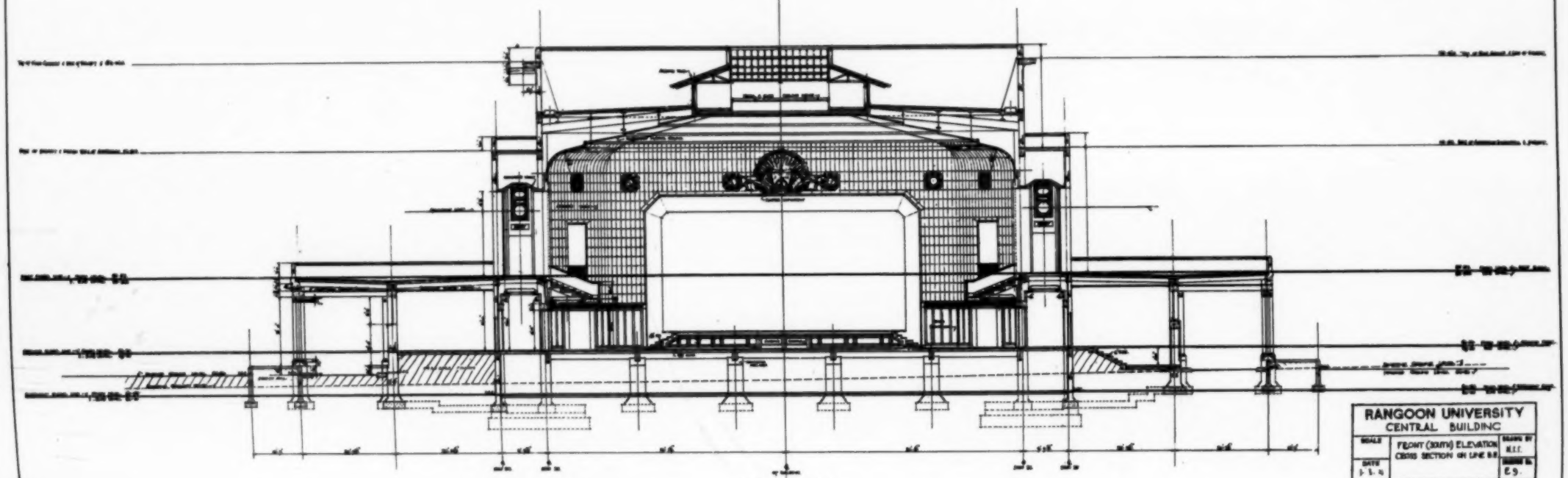
RANGOON UNIVERSITY CENTRAL BUILDING.		
SCALE	SIDE (EAST) ELEVATION. LONG SECTION ON LINE A.A.	DRAWN BY M.S.S.
DATE 1-3-28		DRAWING No. E 10
T. O. FOSTER, F.R.I.B.A. ARCHITECT 6 NEW BURLINGTON ST. LONDON. — 13 PRINCES ST. CAVENDISH.		

Hall.

Mr. T. O. Foster, F.R.I.B.A., Architect.



FRONT (SOUTH) ELEVATION.

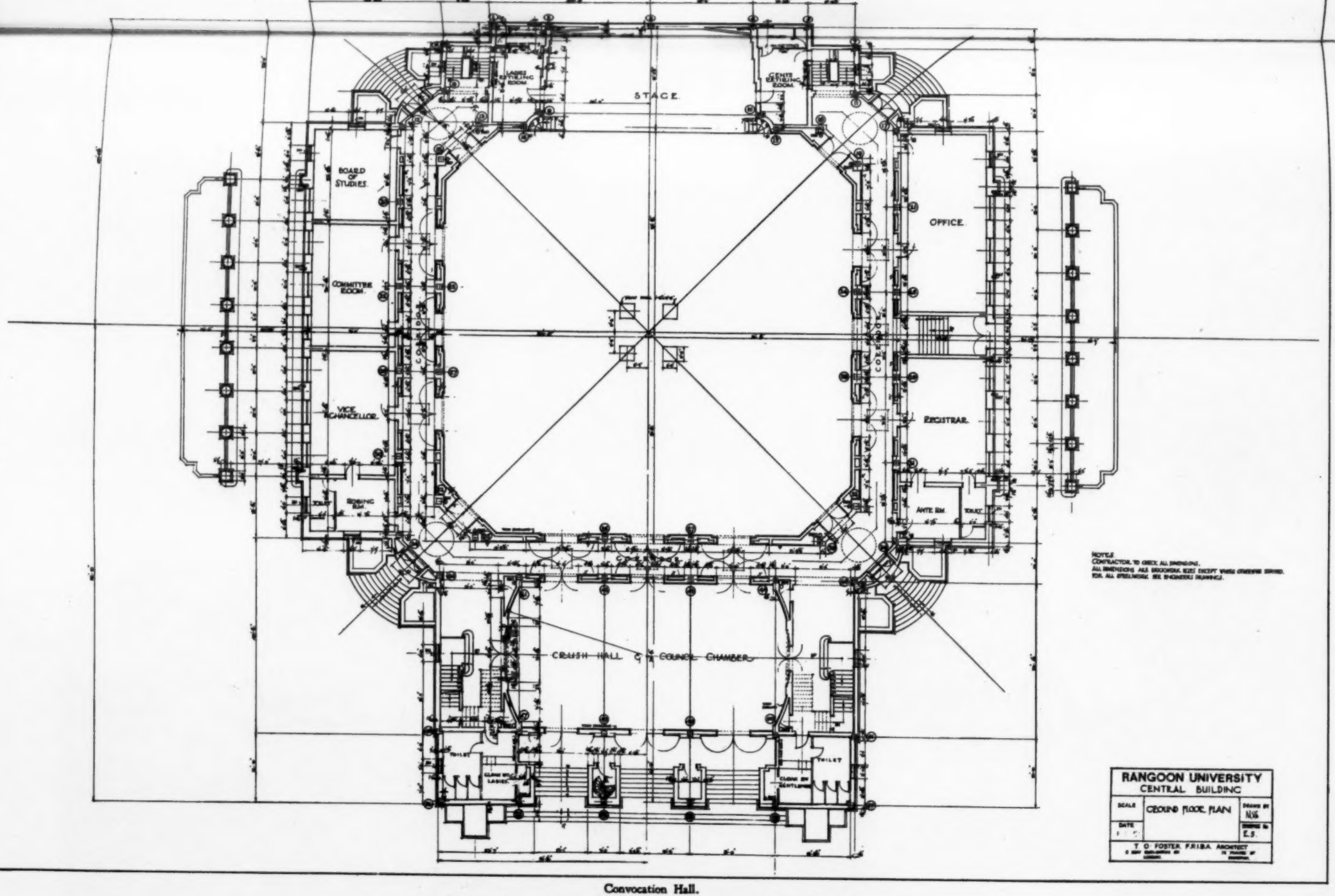


SECTION B.B.

RANGOON UNIVERSITY
CENTRAL BUILDING

SCALE	FRONT (SOUTH) ELEVATION CROSS SECTION ON LINE B.B	DRAWN BY M.I.I.
DATE 1.1.44		DRAWING No. 69.

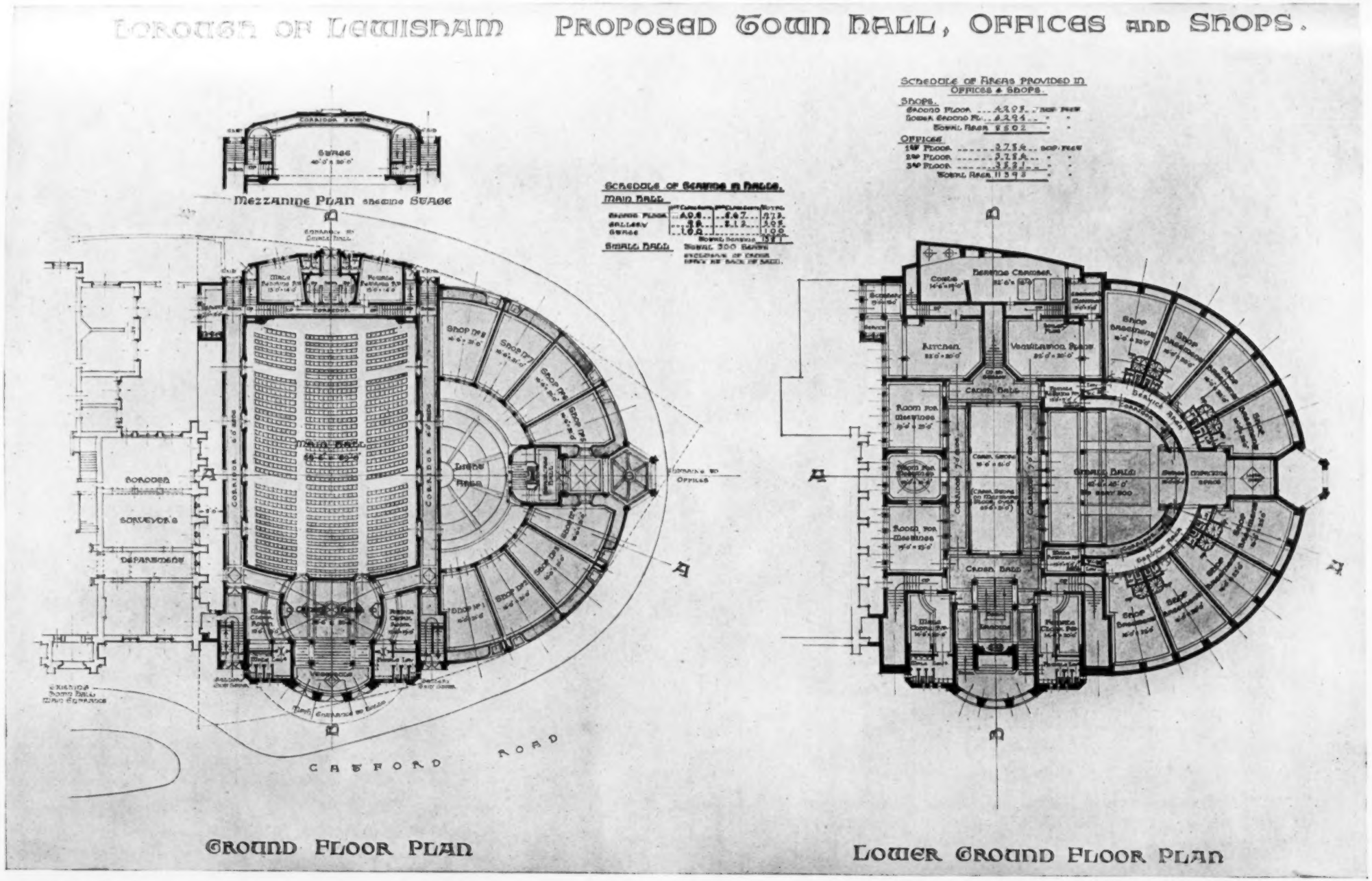
T. O. FOSTER, F.R.I.B.A. ARCHITECT



Convocation Hall.

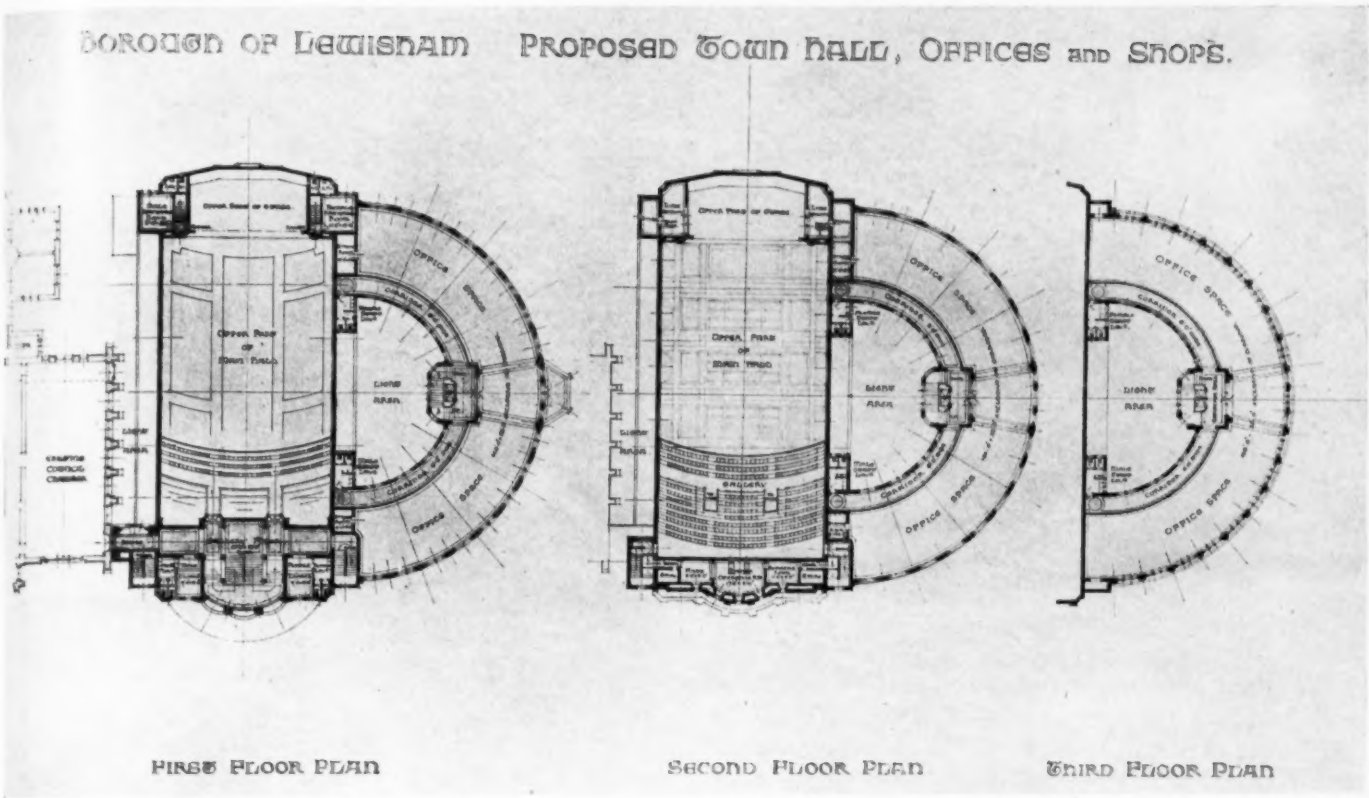
RANGOON UNIVERSITY. Mr. T. O. Foster, F.R.I.B.A., Architect.

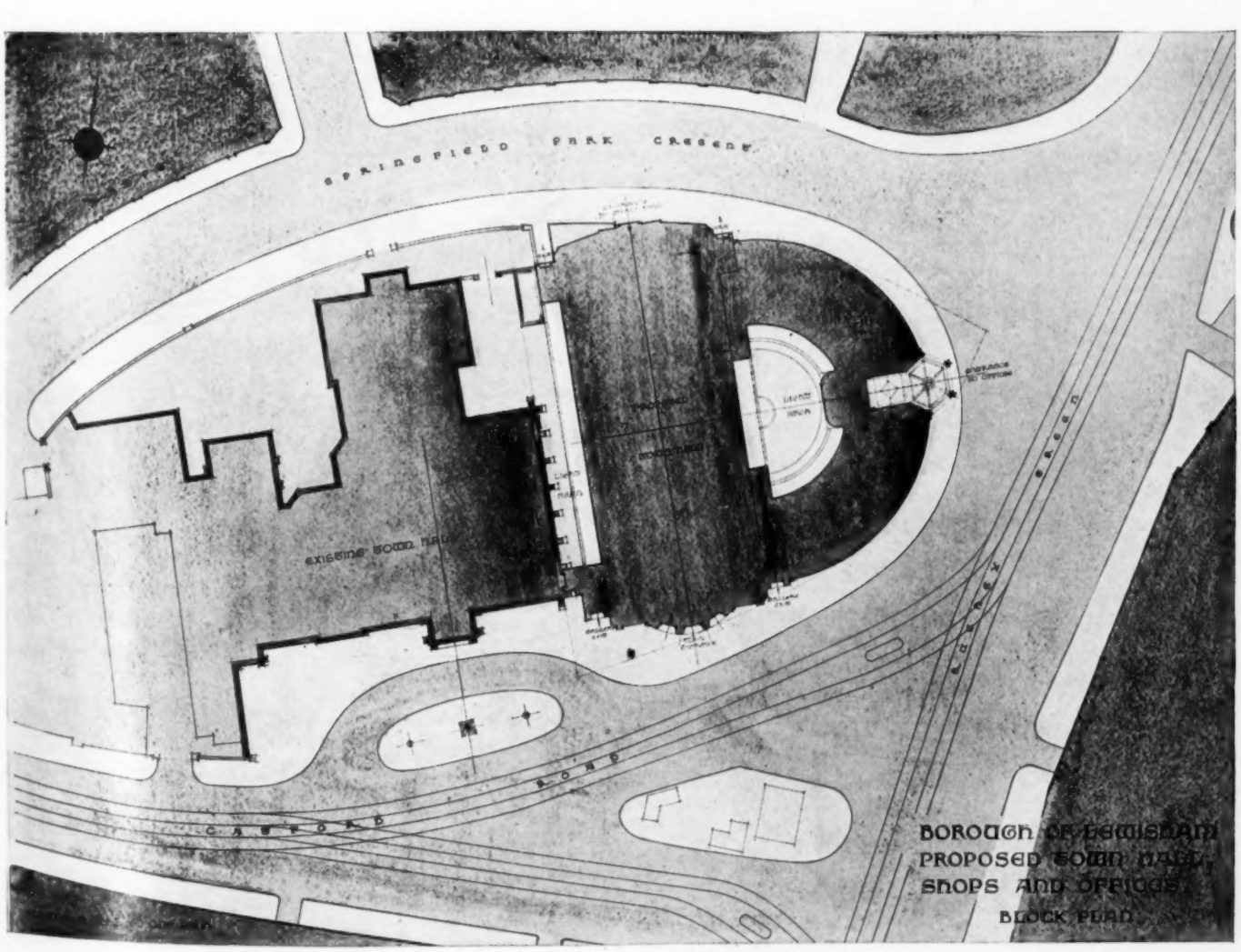
BOROUGH OF LEWISHAM PROPOSED TOWN HALL, OFFICES AND SHOPS.



Lewisham Town Hall Extension Competition: First Premiated Design.

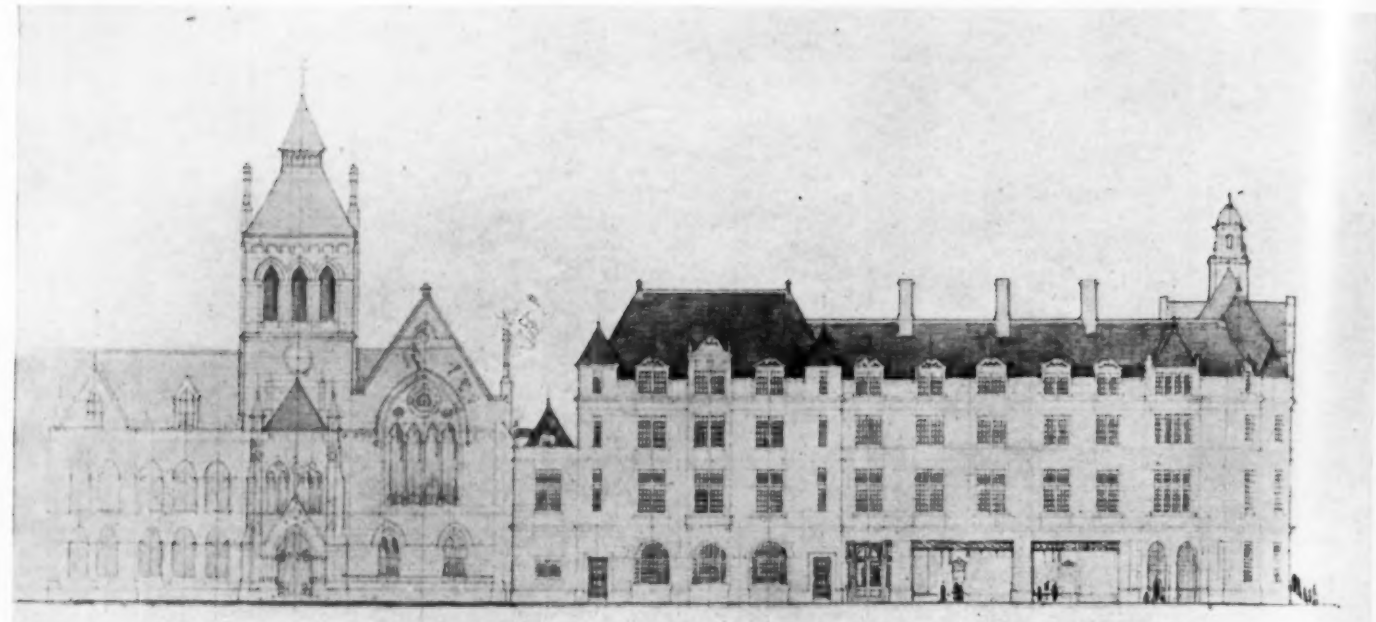
MESSRS. BRADSHAW GASS & HOPE, FF.R.I.B.A., Architects.





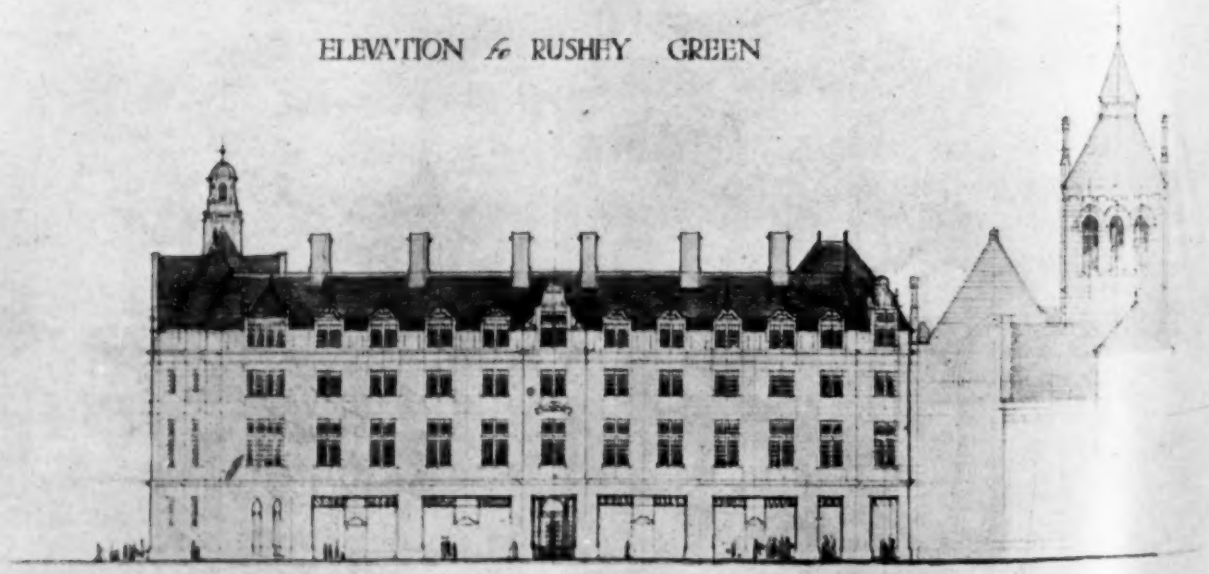
Lewisham Town Hall Extension Competition: First Premiated Design.

MESSRS. BRADSHAW GASS & HOPE, FF.R.I.B.A., Architects.



ELEVATION to CATFORD ROAD

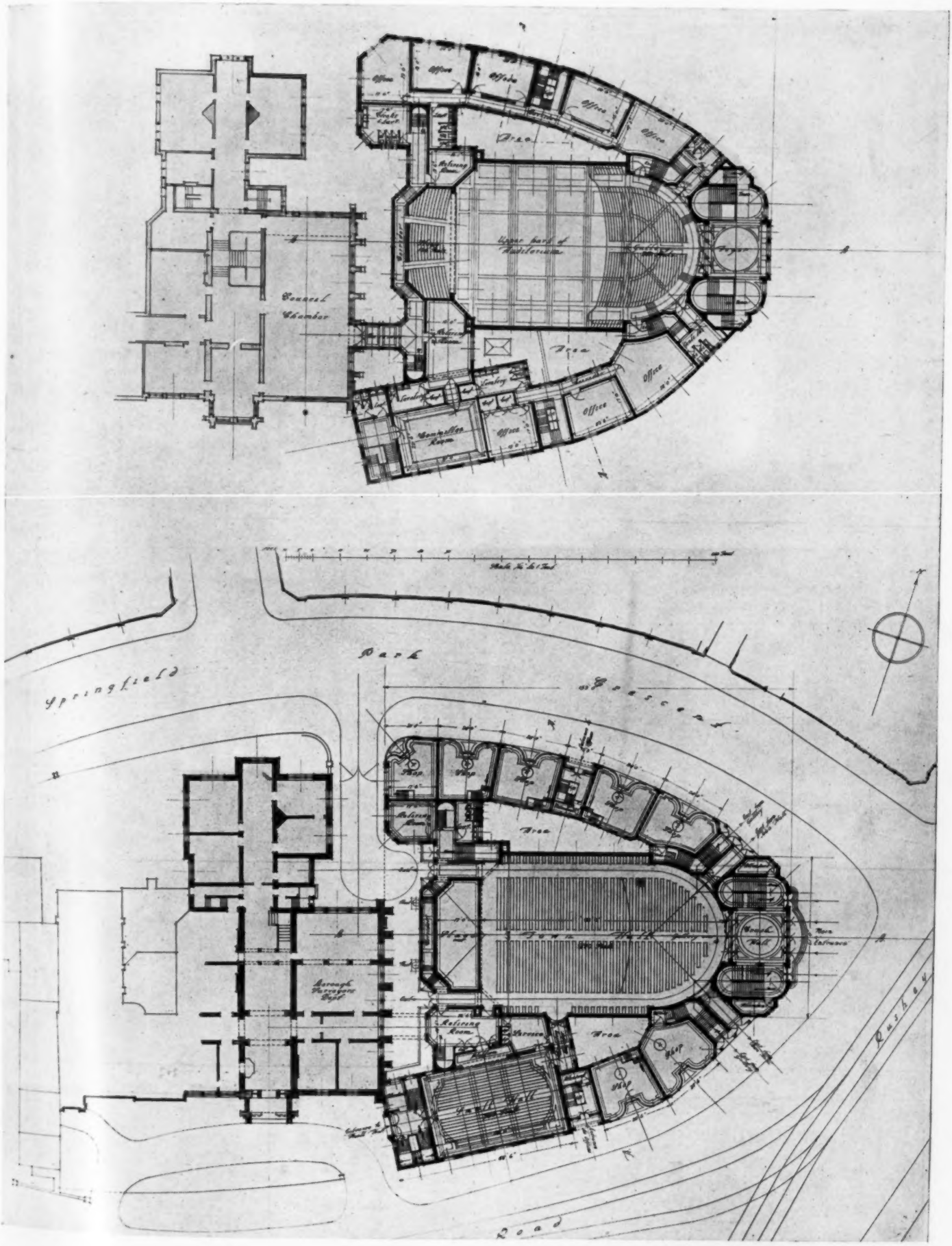
ELEVATION to RUSHEY GREEN



ELEVATION to SPRINGFIELD PARK CRESCENT

Lewisham Town Hall Extension Competition: Second Premiated Design.

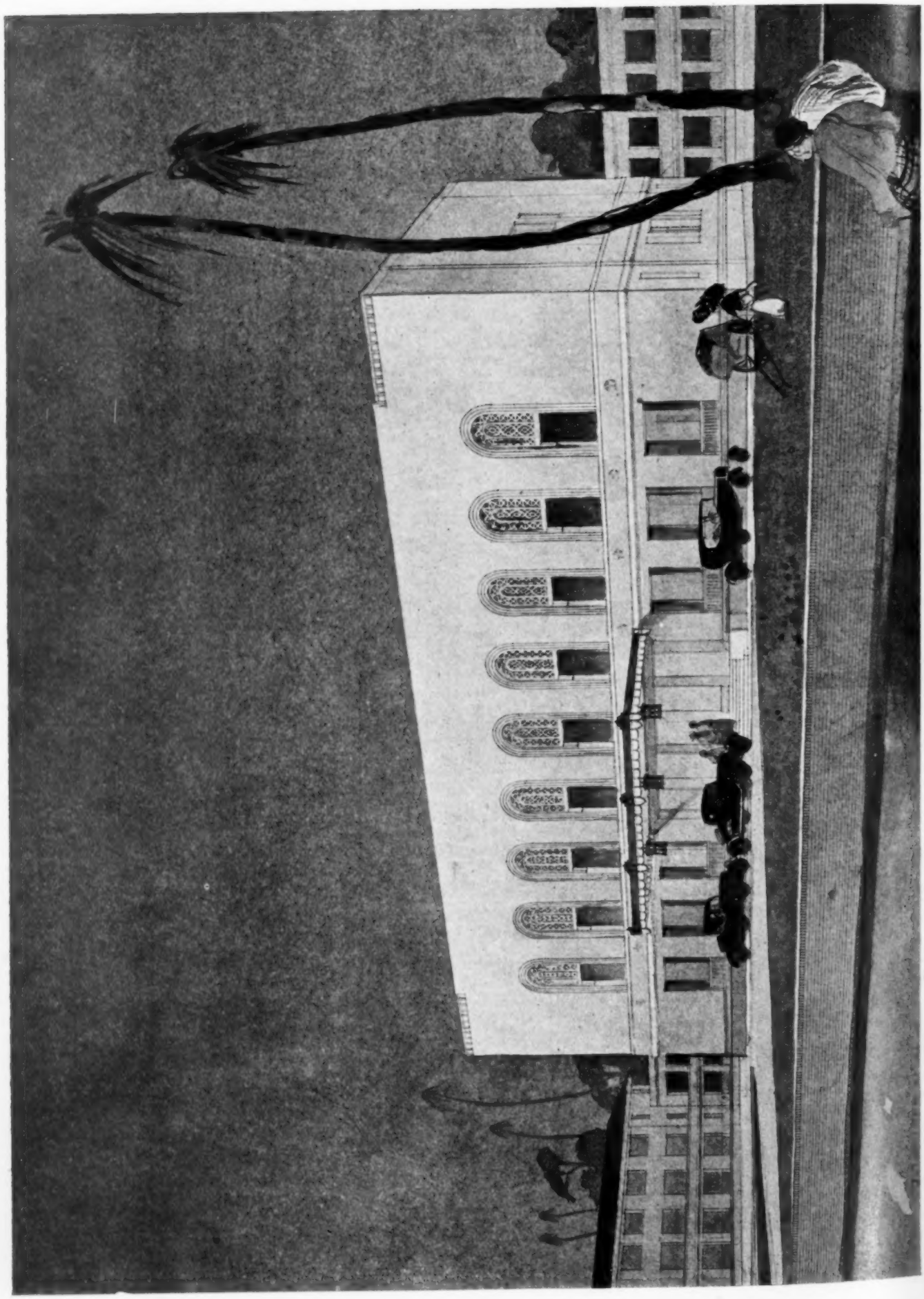
By MESSRS. DAVIDGE & ROSE.



GROUND AND FIRST-FLOOR PLANS.

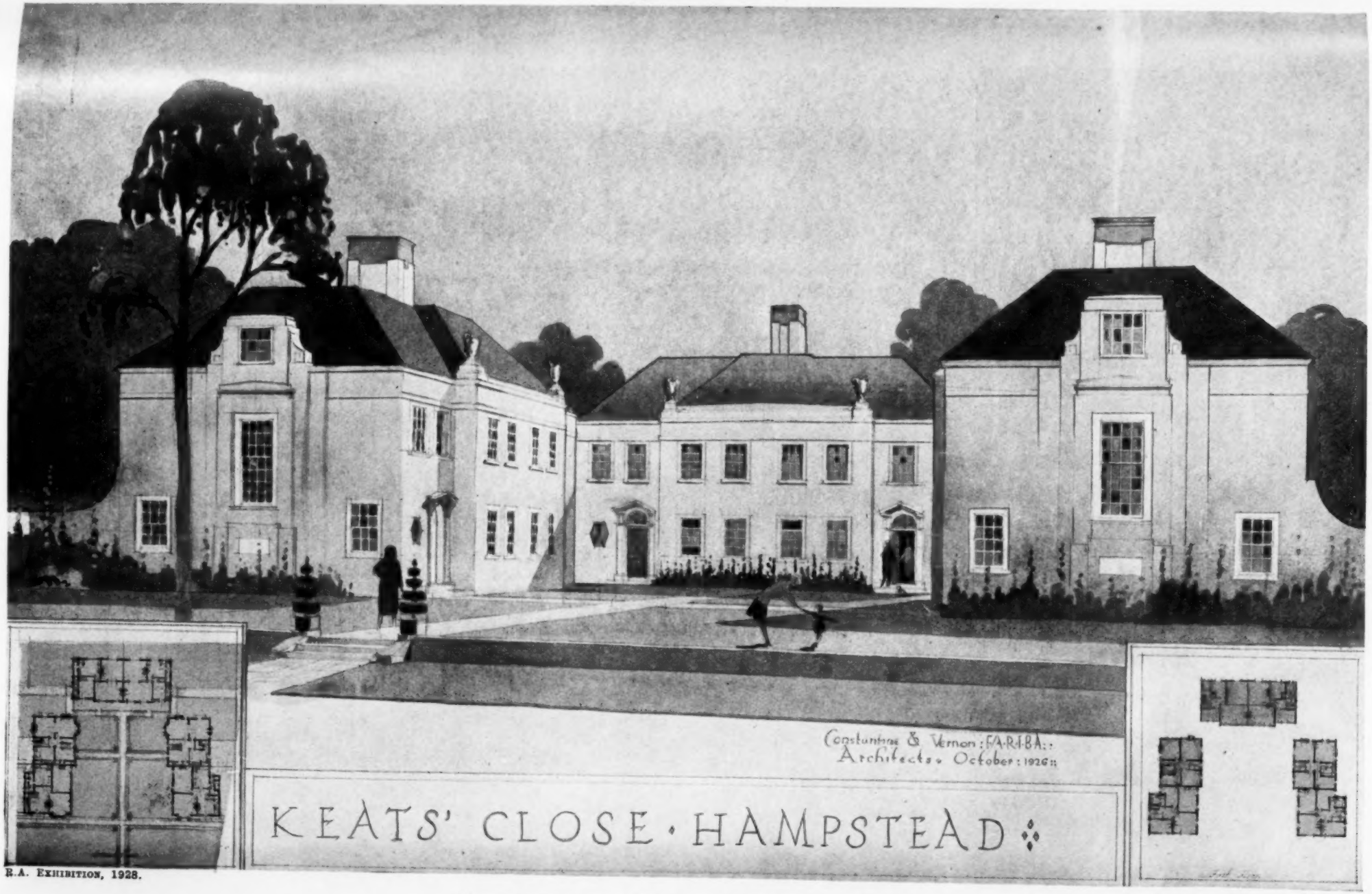
Lewisham Town Hall Extension Competition : Second Premiated Design.

By MESSRS. DAVIDGE & ROSE



University College, Rangoon.
Mr. T. O. Foster, F.R.I.B.A., Architect.

University College, Rangoon.
Mr. T. O. Foster, F.R.I.B.A., Architect.



R.A. Exhibition, 1928.

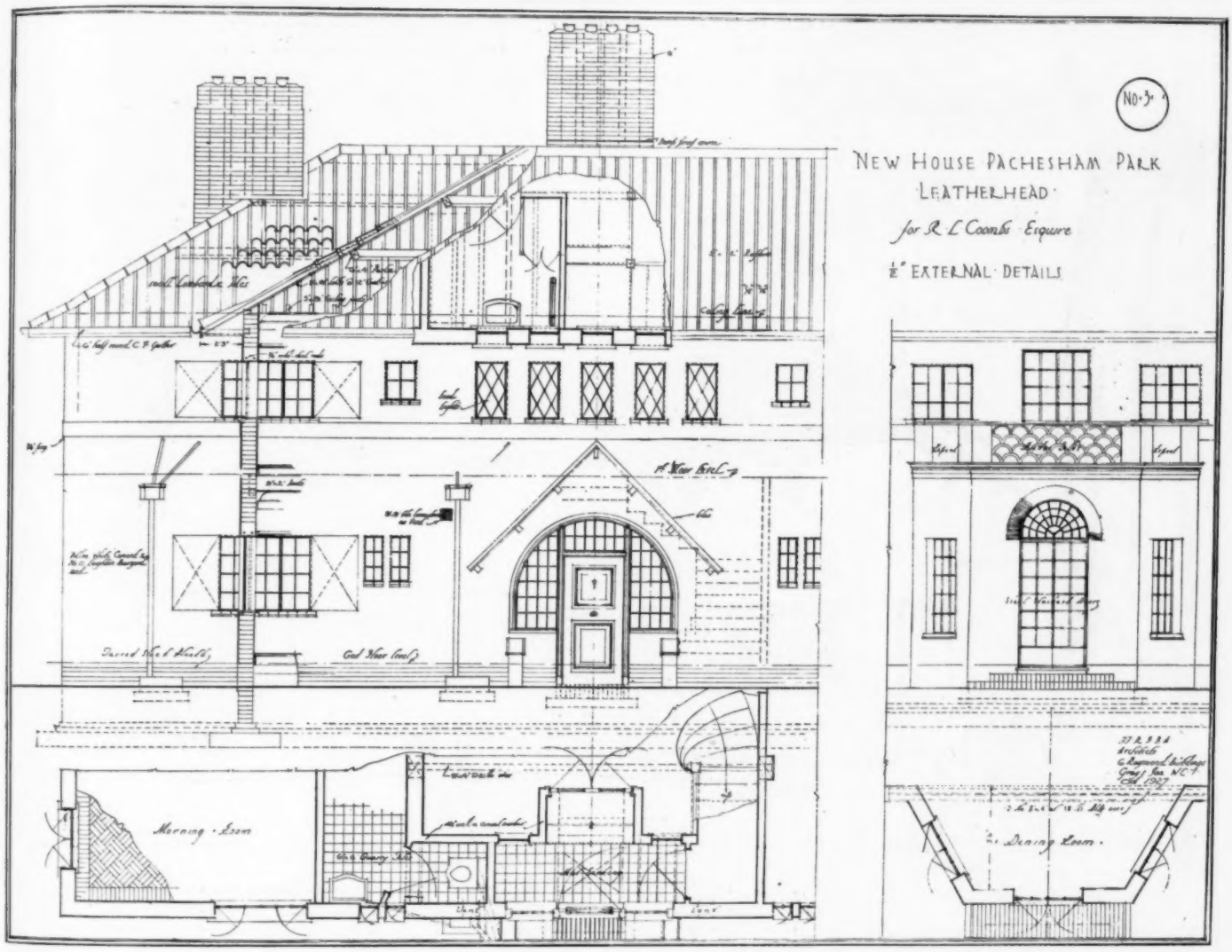
Messrs. Constantine & Vernon, F. and A.R.I.B.A., Architects.

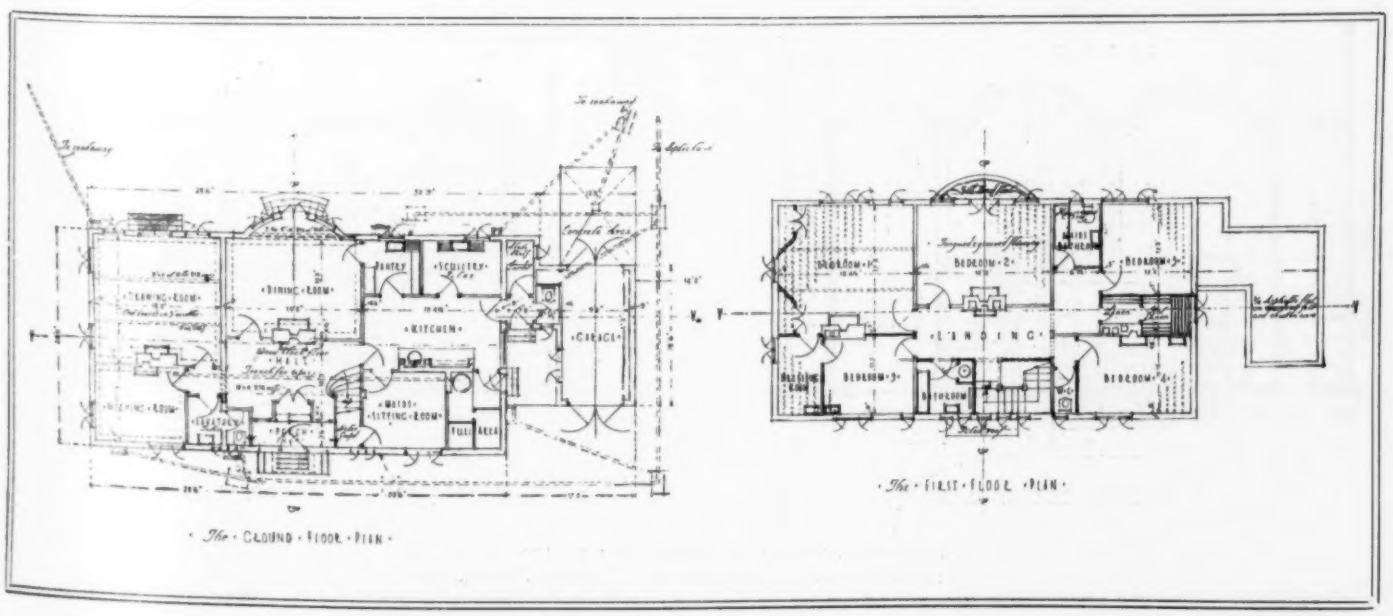
WEST FRONT.

SOUTH FRONT.

House at Pachesham Park Estate, Leatherhead, Surrey.

MESSRS. W. E. RILEY & GLANFIELD, FF.R.I.B.A., Architects.





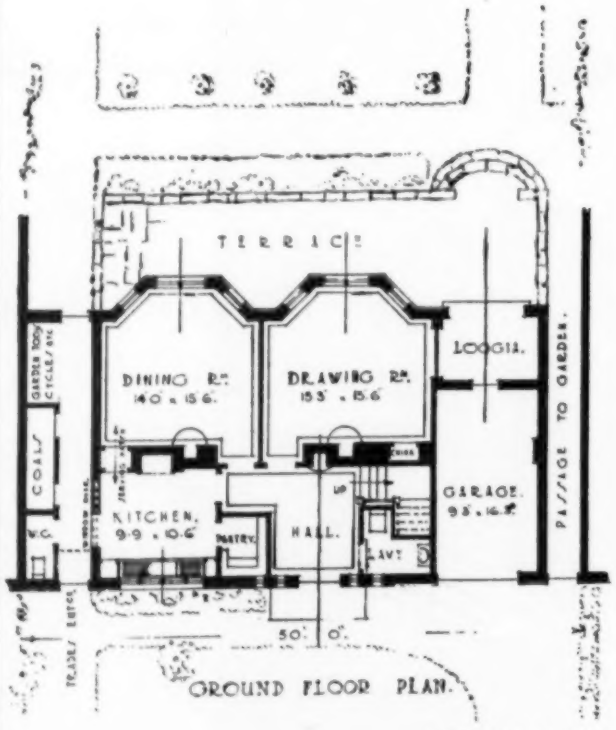
House at Pachesham Park Estate, Leatherhead, Surrey.

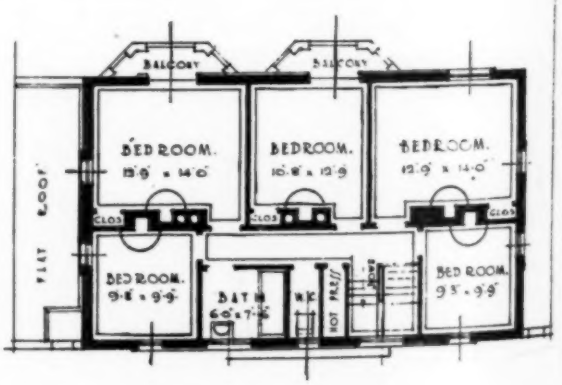
MESSRS. W. E. RILEY & GLANFIELD, FF.R.I.B.A., Architects.

MOUNT MERRION PARK ESTATE, DUBLIN.

COMPETITION FOR HOUSE TO COST £1500.

MATERIALS		CUBAGE	
EXTERIOR WALLS: 9" STOCK BRICK on CONCRETE BLOCK, ATLAS WHITE CEMENT FINISH.		MAIN HOUSE. 40'-8" x 24'-3" x 24'-0" =	23664
TILE CREASING.		BAY WINDOWS 3'-9" x 3'-0" x 15'-6" =	675
STEEL CASEMENT WINDOWS IN WOOD FRAMES.		DEDUCT GARAGE 17'-0" x 10'-6" x 8'-6" =	24339 1994
PLINTH & PORCH ENTRANCE OVER BURNT BRICK WITH JOINTS.			23584 @ 1/15 = £1399
ROOF: RED TILES OR GREEN SLATES.		ADD ROOFED PASSAGE 6'-0" x 21'-0" x 16'-0" =	1360 @ 8" = £ 43
		ADD GARAGE PREVIOUSLY DEDUCTED =	1994 @ 7" = £ 57
		TOTAL COST OF HOUSE	£ 1498.



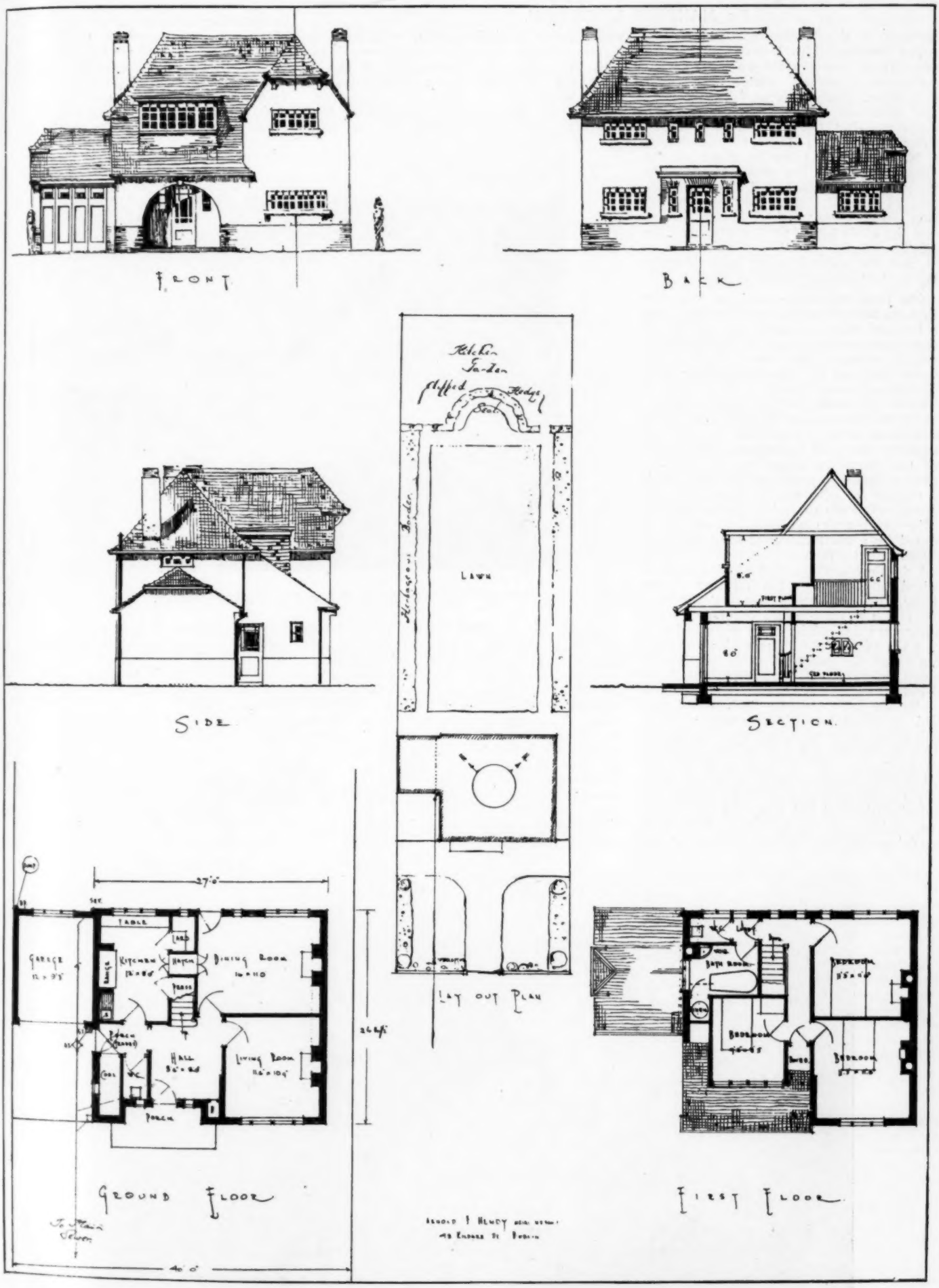


FIRST FLOOR PLAN.

: DONNELLY, MOORE & KEATINGE : M.R.I.A.I. & R.I.B.A. :
: ARCHITECTS 14-15 LOWER SACKVILLE STREET, DUBLIN :

Housing Competition, Mount Merrion Park, Dublin: First Premiated Design, Class A House (cost £1,500).

MESSRS. DONNELLY, MOORE & KEATINGE, MM.R.I.A.I.; Architects.



Housing Competition, Mount Merrion Park, Dublin: First Premiated Design, Class D House (cost £800).

MR. ARNOLD F. HENDY, M.R.I.A.I., Architect.

PROGRESS OF THE SHANNON SCHEME

By MANNING ROBERTSON.

THE visit of the Garden Cities and Town Planning Association to Ireland afforded an opportunity of seeing a unique piece of engineering on a colossal scale. This opportunity, unfortunately, was not taken by many of the architects of Great Britain—by one, to be precise—but the City of Copenhagen was represented by its Mayor, City Architect, City Engineer, and other members of the municipality. The writer gave a brief outline of the scheme from the technical side in *The Builder* of June 11, 1926. Two years of unceasing work, night and day, have transformed the whole face of the country, until the completion of the partial development is in sight, and the water is to be let in to three of the six turbines in October, 1929.

It has been said that, could we view the earth from the moon, our powerful telescopes would show little evidence of individual works of man, except the Great Wall of China, to which we must add some canals. The Shannon head and tail race form a huge gash 9 miles long by some 900 ft. wide, and would be most intriguing to a lunar observer. Starting at O'Brien's Bridge, the dam across the Shannon is more than half finished, the Shannon at this point having more in common with the Seine in Paris than with the Thames at Reading. Much of the finest work will remain for ever out of sight, since all the foundations are carried deep down to rest on the solid rock; under-water erosion is obviated by a stout facing of blocks of fine-textured granite, each cut to shape and numbered as they are quarried at Aughrim, a hundred miles away, in Co. Wicklow. None of these, however, can be seen, but the huge piers and the three great openings to the headrace are flanked by giant piers and curtain walls of concrete. From this point for seven miles the headrace continues, mostly through embankments, sometimes 60 ft. high, and 340 ft. wide from bank to bank, spanned at intervals with concrete bridges and tunnelled underneath with concrete culverts, which are to carry subsidiary rivers under the headrace into the old bed of the Shannon. This headrace canal is lined with a wide band of concrete where wave action will come into play, and elsewhere the bed and sides are puddled with local red clay and faced with stone pitching some 3 ft. thick. The headrace debouches into the six turbines at the power house at Ardnacrusha, with its prodigious concrete pylons, where the conduits, each 18 ft. 9 in. in diameter, fall 87 ft. A ship hoist at the side gives access for ships up to 150 tons.

Below the power house, the tailrace continues for a mile and a half into the tidal estuary. The mains from the power house radiate at 110,000 volts, and are suitably stepped down for distribution over the entire Free State. The whole scheme, including the transformer stations and standards, is being carried forward simultaneously at the same rate. All along one sees these great Robots moulding the face of the earth, while specks of men climb about like flies; indeed, in the presence of these machines, towers, and embankments, one is inclined to forget that there is a human side, hardly less interesting than the concrete, steel, and machinery. Actually, the camps for the 5,000 employees, and the arrangements for the men's food, comfort, and recreation well repay a separate visit. The work is heavy and the hours—50 to the week—long, but there is no difficulty in obtaining recruits for the endless variety of labour required. Gaelic-speaking Westerners, Belfast riveters, stoneworkers, engine drivers, city clerks and accountants, skilled tradesmen and farm labourers, make up the present Irish quota on the site to some 3,800 out of the approximate gross total of 5,000. The contract being in the hands of Messrs. Siemens-Schuckert, a considerable number of skilled and clerical German workers is employed, and these occupy a self-contained camp, with married quarters and a children's school. These men necessarily fill the experienced executive posts, and the two camps must be compared with this distinction in mind. The majority of the Irish workers in the camp are labourers living away from their families, and the use of the huts and the privilege of buying rations in the camp are optional. The main Irish camp for 700 lies alongside the power house, and it reflects great credit on the personality of the Camp Commandant (an ex-Free State officer,

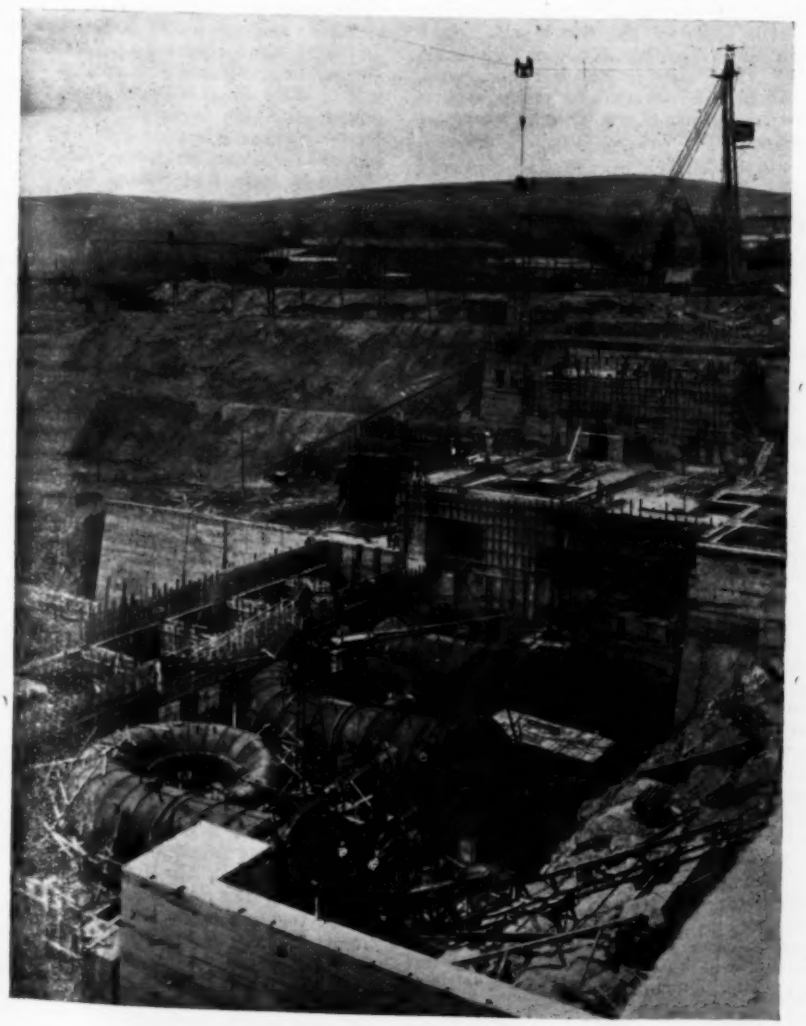
Headrace from the Power House.

Turbine Intakes, Ardnacrusha.

employed by Messrs. Siemens-Schuckert) that he maintains discipline with no special military powers, and with an administrative staff of eleven, including night workers, storekeepers, cooks and orderlies. The same commandant is also responsible for the three other camps, each under a sub-commandant, thus fulfilling the needs of the huge area, which extends 9 miles along the Shannon. The men work day and night shifts alternate weeks, so the huge machine is never still, and the kitchen is only closed for two midnight hours.

Lack of space forbids entering into technical details of the scheme itself, which is amazing in its sheer naked magnitude, as well as in the forethought that appears to provide for the most minute contingency. The party was taken over by Mr. John Creagh, Chief Guide of the Electricity Supply Board, while Mr. W. L. Stapleton, Camp Commandant, kindly gave facilities for seeing the chief Irish encampment. The Mayor of Limerick and the City Engineer received the guests, and spared no pains in showing the city housing schemes, as well as some of the local and historic points of interest.

The Great Southern Railway offers every facility (including return fares at single price) for visiting the scheme; there is a most efficient service of guides, and 'buses cover the whole area. One is confident that if English architects, builders, and others knew of the chance that exists of seeing so vast a project in the making, they would take the opportunity of paying us a visit before the waters close over much of the finest and most instructive of the work. The accompanying photographs have kindly been lent by Messrs. Siemens-Schuckert (Ireland), Ltd., with permission from the Electricity Supply Board.



The Shannon Scheme: Spiral Casings to Turbines.

(*See page* 432.)

LEWISHAM TOWN HALL COMPETITION

THE awards in this competition are given under "Competition News," page 416. The conditions called for town hall, shops and offices on the site adjoining the present town hall buildings. Seventy-one designs were received. The assessor (Mr. F. Winton Newman, F.R.I.B.A.), in his report, says: "In awarding the first place to the authors of the design No. 11 (Messrs. Bradshaw Gass and Hope), I am of opinion that their design more satisfactorily than any other fulfils the requirements as laid down in the conditions and instructions issued to competing architects, both in general conception and in detail planning and design. I am further of opinion that the scheme can be carried into execution within 10 per cent. of the authors' estimate of cost, and when completed, will be admirably suited to its several purposes."

The problem to be solved by competitors (the assessor states) was somewhat unusual and complex, in that it included for the provision of shops and offices in addition to the town hall, with its small hall and subsidiary rooms, etc., and further, it was essential in arriving at a satisfactory solution that the several units should be so planned and designed as to be part of, and not be inharmonious with, the general character of the existing town hall buildings. "The design placed first," he continues, "provides for a well-planned scheme fulfilling the requirements as scheduled in the conditions and instructions. The elevations have been dealt with in a dignified manner, and should group up well with the existing work. The disposition of the two main units, viz., (1) the town hall, and (2) the shops and offices, is very satisfactory, in that the latter have been planned almost wholly at the Rushey Green end of the site, and the town hall and its subsidiary rooms in close touch with the existing buildings. The town hall is well arranged, and provides for a total seating capacity of 1,381 persons—973 in the body of the hall, 308 in the end gallery, and 100 on the platform—thus striking an average between the minimum of 1,250 and the maximum of 1,500 laid down in the conditions.

"The hall is approached from Catford-road, and has a well-arranged crush hall, with cloak rooms and lavatory accommodation for both sexes. A gallery foyer is arranged above the crush hall, and is reached therefrom by the main staircase, with a well-schemed connection to the present council chamber at this level. Access to the foyer is also obtained from the two gallery staircases direct from the street, which staircases also continue up and provide access to the seats in the upper part of the gallery. Adequate exits are arranged both from the body of the hall and the gallery, and satisfactory accommodation for artists and others is provided at the stage end of the hall. The small hall, with adequate cloak room and lavatory accommodation, etc., together with the additional rooms, is planned on the lower ground floor, and is approached from Springfield Park-crescent, while alternative access is also obtained from the crush hall to the large hall, thus allowing for use in connection with the latter, should occasion arise. The shops have frontages in one sweep facing Rushey Green, Catford-road, and Springfield Park-crescent, and with their basements should prove a sound financial proposition—it may be noted that the authors have divided the total area into eight shops, but this division is possible of variation without detriment to the scheme. The floor area provided for letting as shops is 4,208 super feet, with basements in addition amounting to 4,294 super feet.

"The offices have been schemed on the three floors over the shops, and are approached centrally from Rushey Green by an adequate staircase and lift. The floor space available for letting on the several floors has been left entirely open with the exception of the corridors indicated, and the whole area may be divided into suitable offices to suit the requirements of tenants. The total floor area provided, including corridors, is 11,393 super feet.

"As regards the external architectural treatment of the whole scheme, this has been ably designed in the Gothic manner, and will undoubtedly harmonise with the existing town hall building, and group up well from the many points of view from which it will be visible. The assessor is of opinion that in detail it is somewhat too elaborate, and in execution the design would gain in quality if some of the detail is simplified; this is a minor matter, and does not detract from the able manner in which the authors have treated the buildings on all frontages."

Exhibition of Decorative Art.

An exhibition of decorative art is to be held, under the patronage of the Queen, at Lansdowne House, Berkeley-square (by permission of Mr. Gordon Selfridge), during the week beginning February 18, 1929. The object of the organisers is to trace the development of English decorative and domestic art from the Tudor period to the present day, and the exhibition will include tapestries, carpets, hangings, embroideries, furniture, clocks and plate, only the finest specimens from private collections being included. Promises have already been received which will ensure the success of the exhibition, and the Queen herself intends to be an exhibitor. The proceeds will be allocated to the Invalid Children's Aid Association.

THE ROYAL ARCHÆOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND

SUMMER MEETING AT SHREWSBURY.

THE Institute this year selected as its field of operations the interesting County of Salop, making its headquarters at Shrewsbury, a town that all archæological societies delight to honour. The proceedings extended from July 24 to August 1 and were well attended. The members were favoured with excellent weather and during the whole time of their pilgrimage only suffered one wet afternoon. The Institute was honoured by having as its President the distinguished scholar, historian, and man of affairs, Professor Sir Charles Oman, K.B.E., M.A., LL.D., D.C.L., F.S.A., M.P. Several learned antiquaries had consented to act as cicerones and to describe the places visited, including Mr. Harold Brakspear, F.S.A., Prebendary W. C. Clark-Maxwell, F.S.A., the Dean of Norwich (Dr. Cranage), Professor Hamilton Thompson, and other professors of "light and learning," and the Institute was very fortunate in having as its Hon. Secretary of the meeting Mr. W. C. Soden-Bird, of Newcastle-upon-Tyne, whose arrangements were admirable and were most excellently carried out.

In the afternoon of Tuesday, July 24, the company assembled in the Great Hall of Shrewsbury Castle, where they were welcomed by the Mayor on behalf of the Corporation of Shrewsbury and by Sir Offley Wakeman, Bart., on behalf of the Shropshire Archæological and Natural History Society, and Sir Charles Oman gave an account of the castle. All were glad to hear that the ancient building which had suffered many vicissitudes had since their last visit been purchased by the Shropshire Horticultural Society and presented to the Corporation. The hall had been restored and the intermediate floors and partitions of the former dwelling-house removed. Shrewsbury Castle stands on the narrow isthmus formed by the sweep of the Severn round the town. Its first builder was Roger of Montgomery, who threw up the great mount shortly after the Conquest. Of Roger's building nothing now remains except, perhaps, the Norman gateway through which the outer bailey is entered. The remainder of the surviving early work, consisting of the great hall, with round corner turrets, a fragment of the inner bailey wall, and the postern, all dates from the time of Edward I, who strengthened the castle c. 1290, as part of his border policy. With the coming of peace the works fell into neglect, and were ruinous in Leland's time. A century later the castle was repaired so that it might be garrisoned for the king (an upper floor was added to the great hall at this time), but it was taken by the Parliamentary forces in 1645. In 1663 the castle was given by Charles II. to Lord Newport, afterwards Earl of Bradford. In the eighteenth century the site was leased to Sir William Pulteney, for whom the building was remodelled as a private dwelling-house by Telford, the road engineer, who also erected the conspicuous garden turret overlooking the river. Perhaps Telford was scarcely the best man to be chosen for creating this transformation. It is satisfactory that some traces of his efforts should have been removed and that the castle is now placed in the careful hands of the Corporation.

A short walk led to the Council House, so called from its use from 1571 till the end of the 17th century as the place of meeting of the Court of the Marches of Wales, which was held alternately at Shrewsbury and at Ludlow. It was the official residence for the President, and has a richly carved half-timber gatehouse, built in 1620 by Sir Richard Owen, of Condover. Additions were made in 1571 to meet the requirements of the Council, whose long council-chamber ran the length of the building on the first floor. The house has been almost completely modernised and is now divided into three dwellings. In one of these the old entrance-hall remains.

The company then passed on to the magnificent church of

St. Mary's, Shrewsbury,

which was described by the Vicar, the Rev. C. E. Jarman, M.A. The Norman church consisted of chancel, transepts, nave and central tower; a western tower was added about 1170. There was a general rebuilding at the end of the twelfth century, when aisles were added to the nave, the chancel extended eastwards and the south porch erected. The chapel of the Trinity, on the south side of the chancel, was built about 1360, and a hundred years later became the chapel of the Drapers' Gild; it was repaired in 1582 for the use of the scholars of the free school.

There is an unusual amount of ancient glass: the east window was made by John de Charlton and dame Hawise, his consort, and was originally in the Church of the Greyfriars, thence removed to old St. Chad's and subsequently given to this church; the window on the north side of the chancel depicts incidents in the life of St. Bernard, and came from the Abbey of Altenburg; other old glass of the fifteenth century is said to have come from the Abbey of Herckenrode, in Belgium, or the Cathedral of Treves. It is not generally known, nor was it mentioned at the meeting, that in this church there is some glass that came from the School Chapel of Winchester. A long time ago some old glass was sent to Shrewsbury to be releaded, and never found its way back, and was incorporated with some of the St. Mary's glass and remains there to this day! "Tell it not in Gath!" The spire is 220 feet high, and in 1894, when the summit was under repair, the upper part was blown down and destroyed the nave roof.

South of the church is the half-timbered hall of the Drapers' Gild, one of the many ancient and interesting old houses of the town which have been so ably described by Mr. H. E. Forrest in his "Old Houses of Shrewsbury, Their History and Associations." The interior of this hall is panelled in oak and retains its original furniture.

Many of the street names in Shrewsbury are curious, as the visitors noted when they passed along Dogpole and Wyle Cop and English Bridge to

The Abbey Church,

which was described by the Vicar, Prebendary F. A. Hibbert. The Abbey of St. Peter was founded before the Doomsday Survey by Roger de Montgomery, Earl of Arundel and Shrewsbury. It was a mitred abbey and richly endowed. Two monks of Seez, in Normandy, were brought over to erect the buildings. Henry VIII. intended to make Shrewsbury a bishopric and to use part of the endowments of the abbey for the new see. But these good intentions were never carried out, and the abbey buildings were granted to William Langley, a Salop tailor, who soon set to work to pull them down. However, fortunately, the nave was parochial and that was spared. It is a noble church, formerly having seven bays, but in the 14th century a massive square tower was built on the site of the two western bays, and the two bays to the east were remodelled. The remainder is original work. There is a large 13th century north porch with a parvise over it, much altered in the 15th century. The fine chancel was built by Pearson in the last century. The claustral buildings are all destroyed, but for some unknown reason the beautiful 14th century pulpit of the frater was allowed to remain. When we first knew it it was in the uncongenial surroundings of a coal-yard, from which it has been rescued and girt by a grass sward. Close at hand is the charming building known as

Whitehall,

built by Richard Prince, a prosperous lawyer, in 1578-1582. This was described by Mr. Brakspear. Prince used the stones taken from the destroyed abbey buildings. It is a fine house with an octagonal turret in the centre and ornamental Tudor brick chimneys. The interior has been adapted to modern needs. The gatehouse was built at the same time, and there is a dovecot retaining its revolving ladder inside. The out-buildings are the remains of the abbey barn, and the abbey wall bounds the garden.

In the great hall of the castle the Mayor gave a reception in the evening and cordially welcomed the members of the Institute to the town. There was an exhibition of the civic regalia and charters, of which there are many, and Mr. R. F. Prideaux, the Town Clerk, ably described them.

WEDNESDAY, JULY 25.

On this day the chief places of interest to be inspected were the Abbeys of Buildwas and Haughmond.

Conducted by Mr. Brakspear, the pilgrims first visited

Buildwas,

an admirable plan of which had been drawn up by the conductor of the party and proved most useful and helpful.

Buildwas Abbey was founded on the south bank of the Severn in 1135 by Roger, Bishop of Chester, for monks of Savigny, and hallowed in honour of St. Chad (in 1147 all houses of this order were given over to the Cistercians). The buildings are on a very modest scale and are arranged in the usual Cistercian manner. The church is on the south side of the cloister: it consists of a short presbytery, transepts with two chapels to each, and an aisled nave of seven bays, and with the exception of the aisle walls, is all standing. There is no entrance at the west end. The chapter-house remains with its vaulting, which is carried on four columns. Parts of the infirmary buildings are incorporated in a modern house. The rest of the buildings have disappeared.

Half-an-hour's drive conveyed the party to

Madeley Court,

described by Prebendary W. G. Clark-Maxwell, F.S.A. Formerly a manor house of the priors of Wenlock, it is approached by a fine gateway, probably of early 17th century date, flanked by octagonal towers. The carriage-way has been bricked up and the building converted into cottages. The Court proper is an L-shaped and many-gabled building, now partly inhabited. On the ground floor is a large dining-room with a great fireplace, there is a fine oak staircase, and many upper rooms, all gradually falling into decay. In the middle of the desolate walled garden is a great square block of stone, on three sides of which are cup-holes, each of which once held a dial.

From Madeley Court the pilgrims returned to Shrewsbury for luncheon and then proceeded to Haughmond Abbey, which was reached after a short drive of four miles.

Haughmond Abbey

was described by Mr. Brakspear. It was founded by William FitzAlan, of Clun, but the date is uncertain, for canons of the order of St. Austin. It was hallowed in honour of St. John the Evangelist, and at the suppression was worth £259 13s. 7d. clear. It was built in the first place on a small scale, and the church consisted of a short presbytery and transepts, each with one chapel to the east. Before this church was completed the building of the whole abbey was begun on a larger scale. The new church was built to the north of the old, and consisted of presbytery, transepts with two chapels to each, and a long aisleless nave. The vestry, chapter-house and parlour occupied the east side of the cloister and the dorter was built

over a subvault in a south-easterly direction from the parlour. The reredorter was at its southern end running at yet another angle to the south-west. The frater occupied its usual position and there was a western range both of late twelfth-century date of unusually delicate design. The chapter-house entrance and the two doors into the church were altered at the same time. In the thirteenth century an aisle with a porch was added on the north side of the nave. There is a second court to the south having the kitchens on the west and the infirmary with the abbot's lodging on the south, all mostly of the fourteenth century. Part of the buildings have been converted into a dwelling-house.

The company then returned to Shrewsbury and visited

Old St. Chad's Church,

which Mr. Brakspear described. It is a building, or rather the remains of it, which created some melancholy reflections. Long before the Conquest St. Chad's Church was that of a college of priests. It was cruciform with a central tower: in 1393 the roofs and spire, which was covered with lead, were destroyed by fire. In 1788 repairs by underbuilding one of the piers of the central tower were in operation when "the slight vibration occasioned by the chimes proclaiming their matin tune at four o'clock on July 9 caused the decayed pillar to give way, when the tower rent asunder and with the heavy peal of bells it contained, falling on the roof of the nave and transepts, crushed those parts of the edifice into ruinous desolation." The only portion of the church now remaining is the chapel on the south side of the quire, which retains the arches from the quire and transept and the sedilia of the former. There is a vice at the south-west angle.

After tea the pilgrims journeyed to the famous Shrewsbury old school buildings, which now are owned by the Corporation and are used as a public library and museum. Shrewsbury School was founded and endowed by Edward VI in 1551, and was originally established in a timber building to which a tower, a chapel and a library were added in the reign of Queen Elizabeth. That portion of the present building was begun in 1595 and completed in 1617; the remainder was built in 1627-1630. The school was removed to its present site across the river in 1882. Mr. E. T. James, Curator and Librarian, conducted the party to the upper floor (formerly known as "Top School"), where some of the relics from Wroxeter are housed. Mr. James called attention to four military tombstones, which indicate the presence of legionary and auxiliary troops; the great forum inscription; two crockery stalls from the forum colonnade, one of them comprising the largest find of this sort yet made in Britain; the fragment of a certificate of citizenship granted to a time-expired soldier, important for the light it throws on the composition of the British Army in the reign of Hadrian: and the fragments of a pillar with reliefs of deities, which probably illustrates a form of worship rarely traceable in this country, though not uncommon in eastern Gaul and Germany.

In the evening Prebendary F. A. Hibbert read an interesting paper on the Shrewsbury Gilds, of which the town possessed many and which throw much light on the history of the town. His lecture was illustrated by lantern slides.

THURSDAY, JULY 26.

Stokesay Castle and Wenlock Priory were the main features of the programme for this day. A long drive of 22 miles conveyed the party to the famous

Stokesay Castle,

which with the church was described by Mr. Brakspear. It is more correctly a fortified house. In 1291 one Lawrence, of Ludlow, procured licence to crenellate, but the house was already built. It consists of a large hall, with open roof and central hearth, is lighted with two-light windows in dormer gables, and is entered by a pointed arch at its lower end. There is a block of buildings at each end of the hall; that at the lower end is of three stories with chambers having fireplaces, and that at the upper end contains the solar over a cellar. The kitchen must have been detached, but is destroyed. As part of the work, after the licence to crenellate was obtained, a picturesque tower of three stories was built to the south in communication with the solar, and the court was walled. The gatehouse of this date has been superseded by a half-timber gatehouse of the sixteenth century. The whole building was defended by a moat.

The church dedicated to St. John Baptist was much damaged in the Civil War, the nave being practically rebuilt in 1654. There is a western tower. The south door is Norman. The chancel contains a very remarkable 17th century double canopied pew. On the walls of the nave are life-sized figures representing possibly Moses and Aaron and texts in 17th century lettering.

After luncheon the company journeyed to

Shipton Hall and Church,

which originally belonged to Wenlock Priory and passed successively to Sir Christopher Hatton, the Lutwyches and Myttons. The present house is a fine Elizabethan stone mansion, with twisted brick chimneys, built in 1569 by one of the Mytton family in the shape of the letter E, with a square turret rising in the eastern re-entering angle and a long roof gallery. Additions were made in the middle of the eighteenth century. The house is approached by a rising terraced forecourt, and behind is an old bowling-green. The interior contains some fine plaster ceilings, much panelling and a great staircase. There is a circular dovecot with no roof, but the central post of the revolving ladder remains.

The church of St. James has some fragments of early glass, a Norman chancel arch and an Elizabethan chancel.

(To be concluded.)

"THE BUILDER" DEBATE—X

PAYMENT BY RESULTS.

"That the introduction of a system of payment by results is needed to increase the speed and reduce the cost of building in this country."

SIR,—This is a very "thorny" subject—so much so that a good many who have held, and still hold, the opinion expressed in the motion I have tabled, have preferred to hold their peace rather than get their hands scratched. It is, however, high time that this subject was ventilated, for shirking never did solve any problem.

I take it that the slowness and dearness of building as compared with similar conditions before the war is an established fact. To lay a thousand bricks a day was then not an unusual thing, whereas to-day the feat is rarely met with. I know of an actual case just recently when two separate pairs of cottages were erected, where in the one case a master builder and apprentice put the roof on in two days, while in the other two paid hands took ten days for the very same job (*i.e.*, the carpentry work only).

Brickwork costs just about twice as much as before the war, although bricks are not double the price. Carpentry work also costs just about double, though timber is not double the price. One hears many excuses to explain away the difference, but none that is very convincing. One, of which we have grown thoroughly tired, is that so many good tradesmen lost their form in the war and have not yet recovered it. This answered very well for a year or two, but I really think that after ten years of peace we have heard enough of it. Another is that the wages of craftsmen were thoroughly inadequate before the war and have been since increased. But here again we find that the increase does not account for the whole increase in building costs, but only serves to emphasise the decrease in output. Yet another is that men worked too hard before the war, and have now settled down to a reasonable output. This is perhaps the worst excuse of all, since never in the memory of this generation has there been a time when it has been so necessary for each and every citizen to work just as hard as ever he can; and this excuse becomes merely a confession of limited output.

The facts seems beyond question to show that the men are not turning out as much as pre-war experience has taught us that they can do; and as this is one of the chief factors in the present high cost of building, something ought to be done about it. But what? I think any measures that are taken with this end in view must take into consideration the following factors:—

(1) That the harder and better a man works the more value he is to the community;
(2) That the reward a man gets should be proportionate to his value to the community.

Neither of these considerations can be satisfied under a system in which a man receives a flat rate of pay whatever may be his output per hour or day, and I can see no way of satisfying them other than by a system of payment by results. The point seems to be so self-evident and unanswerable that one is amazed that we continue to suffer under our present enervating system.

There are, of course, the stock arguments against it. The chief of these is that under such a system "scamping" would be encouraged. But I think that if we really examine this objection it falls to the ground in the average case unless we maintain that the average workman is dishonest. Is it imagined that, even under the present system, a man who is determined to earn his wages with as little effort as possible is not as likely to scamp as one under the suggested system? Craftsmen have reputations to maintain just as much as their supervisors, except that under present conditions they have no incentive to build up a reputation higher than a fair average. You may be sure, however, that neither builders nor architects will permit themselves to suffer from the scamper for long, and the worst offenders would soon find that results are not simply what shows on the surface.

Another objection is that the good slow man would be squeezed out of a means of living by the efforts of his quicker fellows. I do not agree with this contention at all, but believe the direct converse to be nearer the mark. At present the good slow man is paid exactly the same per hour as the quick worker; so it is obvious that except in a great shortage of labour the slow man will be the first to be put down. But under a system of payment by results a builder need only select his men by the quality of their work, since a given task will cost him the same whether done in an hour or in two hours. The slow man would draw a lower wage, it is true, but this is simply the penalty of his nature, representing his value to the community.

It is certain that the building industry sadly needs some stimulant, and I can think of no step more likely to bring this about than payment by results. If the working man were only allowed to feel that an increase in energy contributed directly to his advantage, it is surely certain that the cost of building would come down with a run and open up a vast field of fresh enterprise hitherto held back behind a wall of expense.

I look forward with interest to my opponent's reply, hoping to hear some more plausible reasons against this proposal than those generally put forward.

POSITIVE.

[See also "An Open Letter" by Mr. Fred Thorne, page 438.]

SCHOOLS AND INSTITUTES

L.C.C. School of Building, Brixton.

This school—of which Mr. F. E. Drury, M.Sc., is principal—opens for the 1928-9 session on September 24. The School of Building was established by the L.C.C. in 1904, and is now classified by the Board of Education as a college for further education. The evening departments of this school provide organised courses of training and individual classes for the purpose of instruction in the work of the building industry and of allied vocations and professions. Courses and classes are available to meet the needs of youths who have recently entered the industry, young men who have had considerable experience in the industry and adults who desire to specialise in the advanced sections of their vocation, of young men engaged in public works departments, and of pupils preparing to qualify as architects, surveyors, structural engineers, reinforced concrete engineers or sanitary engineers. The school accommodation includes lecture rooms, workshops and studios for craft practice, architectural and art studios, science laboratories, mechanical testing laboratories, reference library, refreshment room and students' common room. The principal and the teaching staff may be consulted during school hours and will advise prospective students as to :—(1) Appropriate courses of study; (2) the vocational and professional examinations held by recognised professional institutions and other examining authorities, in which the students may be interested. The school is situated in Ferndale-road, Brixton, S.W.4.

Plymouth School of Arts.

The Governing Body of the Plymouth Central School of Arts and Crafts desires to call attention to the recent improved organisation of the school in the direction of architectural education, and the opportunities offered for courses in architecture for those who intend to adopt it as a profession. The courses are designed to meet fully the requirements of the Royal Institute of British Architects, and full-time and part-time day and evening classes have been established accordingly. When the department of architecture of the school receives the full recognition of the Royal Institute, students will be exempted from the Institute's intermediate examination on the production of the School Certificate of having completed the prescribed course of study. Entrants into the architectural profession must produce evidence of having reached the standard of education required to pass any of the recognised public examinations, such as the senior local examinations conducted under the authority of any university in the British Empire, or the matriculation examination of the London University. The principal is Mr. Richard H. Parker, and the head of the School of Architecture Mr. W. W. Wood, A.R.I.B.A., from whom full details are obtainable.

Westminster Technical Institute.

We have received a copy of the prospectus of technical classes at this Institute for the session 1928-9. With the assistance of an experienced and highly qualified staff of specialist teachers, systematic and progressive courses of study, extending over a period of years, have been arranged at the Institute for those engaged on the professional side of the building trade and its allied occupations, and the instruction ranges from that designed for the office junior to the specialised study required by the most advanced students. This instruction is intended to assist the student more efficiently to perform his normal duties, as well as to give him the training requisite for the professional examinations. The courses of study cover the requirements of the Royal Institute of British Architects, the Surveyors' Institution, the Institution of Structural Engineers, the Institution of Municipal and County Engineers, and the Auctioneers' and Estate Agents' Institute. Attention is particularly directed to the courses specially arranged for students preparing for the examinations of the Surveyors' Institution and the Auctioneers' and Estate Agents' Institute.

The architectural studio is open each evening, and architectural students are encouraged to devote as much time as possible to design and drawing. Advanced students preparing for examinations are advised to use the studio for the preparation of their testimonies of study. The teachers are present each evening and will be pleased to guide and help students over any difficulties which they may encounter.

The Westminster School of Art, which is a corporate part of the Institute, provides further facilities for students in drawing from the antique and from life, and in painting, design and decoration. The Session 1928-29 commences on Monday, September 17. The Principal will be pleased to forward to intending students and others interested in the work of the Institute, copies of the prospectus, containing full particulars of the courses of instruction, syllabuses of work, and fees. Intending students should attend at the Institute during the week commencing September 17, to obtain expert advice regarding the courses of study suited to their individual requirements.

THE PRESERVATION OF RURAL ENGLAND

THE Council for the Preservation of Rural England has issued from 17, Gt. Marlborough-street, W.1, a memorandum on the improvement and control of the designs and materials of rural buildings. The memorandum is divided into several sections. After the need for action—already so well realised by those who have regard for the English countryside—has been stated, schemes for the control of rural building are discussed. It is suggested that the machinery for control first devised under the Bath Act (1925) should be installed, by which powers are exercised by an advisory committee, to whom local authorities *may* submit plans. This is composed of an architect, a surveyor, and a justice of the peace. A method of architectural guidance suggested by the Minister of Health having special reference to the reconditioning of old buildings is also given, and in it is suggested the co-operation with some voluntary committee or panel with a view to deciding whether contemplated works are or are not appropriate. A regional, possibly county, system of consultative panels where architectural advice becomes available for builders is suggested. The help afforded might be considered to correspond somewhat to that which a doctor gives in connection with his hospital services to the community. Lastly, it is proposed that ultimately the adoption of local standardised designs for small houses and bungalows would enormously facilitate the work of a member of a panel giving advice to builders who submit a design of complete badness.

This booklet, which contains much additional information on these lines, has also several appendices on town development and the control of elevations of buildings which are worthy of the closest study.

New Delhi Hospital.

The Delhi Municipality propose to build a new Central Hospital for 500 beds on a site of 100 acres of land lying between the Delhi Gate and the Twakman Gate of old Delhi. The cost is estimated at Rs. 66,00,000. Plans have been prepared by Mr. Robert T. Russell, D.S.O., F.R.I.B.A., architect to the Public Works Dept., Delhi.

INQUIRY BUREAU

Contract Question.

[REPLY TO "T. H. R.," SEPTEMBER 7.]

SIR,—Your correspondent has surely missed the point of the variation. A builder anticipating simple fireplaces represented by the small figure allowed might reasonably think the profit so trivial as to forgo it. But if these fireplaces are made so elaborate as to increase in price tenfold, his expenses in handling and correspondence, risk, etc., become a serious matter, and surely a new situation has arisen.

EQUITY.

Tenant's Fixtures.

[REPLY TO "TENANT," SEPTEMBER 7.]

SIR,—In the absence of any evidence to the contrary, an incoming tenant may assume that such fixtures as boilers are a part of the fabric of the house. But occasion may arise where, by permission of the landlord, a tenant has had a boiler fixed as his own fixture, which is handed on from tenant to tenant for a consideration. But this should be made clear to any incoming tenant at the outset.

FIXTURE.

Street Widening.

[REPLY TO "DOUBTFUL," SEPTEMBER 7.]

SIR,—My opinion is that questions of damages for infringement of rights of light and air are concerned with the existing state of affairs, and cannot be prejudiced by any future intentions of the local authority. No doubt, in assessing any damages that may be due, consideration would be taken of the period of time during which injury would be suffered.

TOWN PLANNING.

Church Pews.

[REPLY TO "G. D. C.," SEPTEMBER 7.]

SIR,—Assuming that your correspondent means merely the removal of dirt, by his term "freshening up," all that is needed is a stiff scrubbing brush and plenty of soap and water. Chemicals should be avoided as a treatment of old oak of pleasant colour.

RESTORE.

Leaking Lily Pond.

SIR,—A client of ours, some five years ago, constructed a lily pond. He took great precautions (as he thought) to make it thoroughly watertight by puddling the floor with a good thickness of clay. He has been troubled ever since by the pond losing its water. He has discovered and stopped leaks time after time, but without avail. We are asked to make a sound job of it.

(1) Do you know of any reliable book dealing with the subject practically?

(2) Could any of your readers, having had experience, help us with details of a method that would guarantee success? The pond is about 50 yards in area, of irregular shape, about 30 in. deep.

(3) The clay used was obtained from a local brickyard, and had been through the pug mill. Our client thinks the clay may have lost some of its nature by this means, and may have been better used just as dug from the pit.

(4) Is it possible that the water lily roots may have penetrated the bottom and so have let the water out?

COUNTRY BUILDER.

Licensed Premises.

SIR,—I should be obliged if any of your readers could inform me whether they know of any books published dealing with the requirements and fitting out of public-houses and licensed premises.

J. J.

[We believe our correspondent will find some useful information in "Principles and Practice of Brewing," by W. J. Sykes. Batsford.—ED.]

THE BUILDING TRADE

EVERYDAY SCIENCE FOR ARCHITECTS AND BUILDERS—XXXVI

By A. M. GILES, B.Sc., A.I.Struct.E., A.M.I.E.E.
Diagrams and Illustrations by M. R. DUMVILLE.

Magnetism.

In view of the importance of electro-magnetism, mentioned at the end of the previous article, and in order to assist in making its principles quite clear it is necessary to devote a little time to the consideration of "magnetism." In various parts of the world there is found an iron ore called *magnetite*. Its chemical formula is $Fe_3 O_4$, which means that it is a compound of iron and oxygen. It has at least two properties peculiar to itself, viz. :—

(a) If an elongated piece of it be dipped into iron filings and then withdrawn, it will be found to have many filings sticking to it. Some of these can be shaken off, but many will stick on very tightly. Further, it will be noticed that there are very few adhering to the middle of the piece of ore, while quite large quantities will be attached to the two ends. The piece of magnetite or iron-ore is called a *natural magnet*. The two ends, at which the iron filings mostly adhere, are called its *poles*. The line joining the poles is called the *axis* of the magnet.

(b) If, now, the piece of magnetite be suspended by a thread so that its length is in a horizontal plane, it will eventually come to rest with its axis lying in a definite direction, viz., north and south, as shown at Fig. 87 A. Further, if it be twisted about a vertical axis (the line of the thread) to a different position, and then released, it will turn slowly backwards and forwards, and gradually come to rest again in a direction north and south. Also, if one end of the ore has been marked by a piece of chalk, or by having a small piece of stamp-edging fixed to it, it will be found that, on coming to rest, this particular end will always be pointing in the same direction.

There must, therefore, be some difference between the two ends, and to distinguish them we call the end that points to the north the *north-seeking* end, or the *marked* end, or the *positive* end, and on a drawing denote it by the positive sign +; while the end that points to the south is called the *unmarked* or *negative* end. Sometimes on a drawing, this end is marked with a negative sign "−," but it is, of course, unnecessary if the other end has been already marked.

Artificial Magnet.

It is quite possible to imagine what a tremendous demand there would be for this ore, and how valuable it would become had it to be used in the multitude of positions where magnets are necessary. This condition of things has, however, been avoided

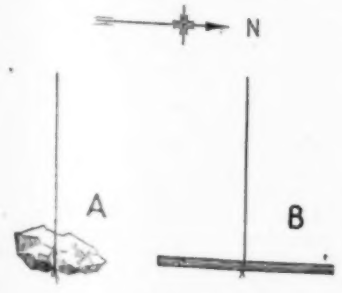


FIG. 87.

since it is possible to obtain *artificial* magnets.

Of the very few substances affected by magnets, it is found that iron and steel are by far the most important. There is a considerable difference between these two, the explanation of which we will leave for the present.

Experiment.

There are three methods—known as *single*, *double* and *divided* touch—of converting a piece of steel into a magnet. Let us discuss the first of these. Fix a piece of steel—say, a knitting needle—in a wooden slot. Then draw the marked, or unmarked for that matter, end of a piece of magnetite slowly along the length of the needle from left to right. Upon reaching the end on the right lift the piece of magnetite well up above the needle and move it back, still above the needle, to the end on the left. Then lower it and draw it again slowly along the length of the needle. Repeat this 20 or 30 times. Then turn the needle in the slot, and draw the magnetite along it several times as before. Continue to do this until you think that all the outside of the needle has been next to the magnetite while it has been drawn along from left to right.

Now remove the needle, or piece of steel, from the slot. Place it in iron filings, when you will find them sticking to it. (It is interesting to mix some iron filings with sawdust and then separate the iron filings from the sawdust by means of this magnetised needle.) Next, suspend it as shown at Fig. 87 B, when you will also find

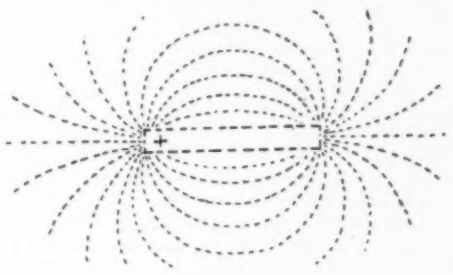


FIG. 88.

that it will come to rest with one end always pointing in the same direction.

The piece of steel is now an artificial magnet. It is important to note, and will be understood later, that if you used the *marked* end of the magnetite in the above experiment, then the end of the needle on the right will be the *unmarked* or *negative* end of the artificial magnet, and, of course, *vice-versa*.

Experiment.

Having magnetised two knitting needles, or two strips of steel, suspend each in turn to find out which is the north-seeking end, and then mark these ends in some way, either by stamp-edging, or by a + sign, or by the letter N. Next suspend one of them, as shown at Fig. 87 B, and let it come to rest. Then, holding the other one in your hand, bring its marked end slowly near to the marked end of the suspended one, you will find that the latter will be repelled, or caused to swing away from the one in your hand. Next, present the unmarked end of the magnet in your hand to the marked end of the suspended one, when you will find that it will be attracted. This is commonly called the "First Law of Magnetism," and it is usually stated as:—"Similar poles repel and dissimilar poles attract one another."

Magnetic Field.

In the previous experiment, it was not necessary for the magnets to touch one another in order for the effects of repulsion and attraction to take place, and this points to the fact that the magnets actually exert an effect outside themselves, i.e., in the space surrounding them. The whole of the space around a magnet, in which it can display any magnetic effect, is called its *magnetic field*. There are two interesting experiments which can very easily be performed to demon-

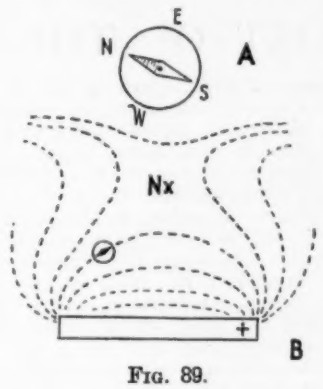


FIG. 89.

strate the existence of this magnetic field, though it can only be shown in one plane at a time.

Experiment. Figure 88.

Make a slot on the middle of a drawing-board sufficiently large to allow a six-inch bar magnet to lie in it so that its surface is flush with that of the board. Place a piece of drawing paper over it. In Figure 88 the magnet is shown with broken lines as it is not seen when it is below the paper. Now sprinkle iron filings, a few at a time, upon the drawing paper each time just tapping the paper with the end of a pencil. If you have arranged for the marked end of the magnet to be pointing to the north, very soon you will find the iron filings will take up positions and present an appearance somewhat similar to that shown in Figure 88. They will be seen to lie along lines which pass from one end of the magnet to the other. The lines will be very much closer to one another near the ends of the magnet. Further they will be much more marked and distinct near the magnet than they are farther away. This, of course, means that the strength of the magnetic field decreases as the distance from the magnet increases.

The lines along which the filings set themselves are known as "magnetic lines of force." It has been agreed that the direction of these lines of force shall be considered as passing from the marked to the unmarked end outside the magnet and completing themselves by passing from the unmarked to the marked end inside the magnet. Further it has for some long time been agreed that these lines of force possess two properties :—(1) There is a tension along their length, i.e., they are, all the time, trying to shorten themselves just like a piece of stretched elastic, or a stretched spiral spring; (2) There is a repulsion at right angles to their length, i.e., two lines of force running side by side try to push themselves apart.

All sorts of variations of the above experiment, Figure 88, can be tried, e.g., (a) by placing the magnet with its marked end pointing in different directions; (b) By using two magnets placed parallel with one another and with their marked ends pointing in the same or opposite directions; (c) By using a horse-shoe magnet, which is the most commonly seen form of magnet.

Experiment. Figure 89.

The second experiment to show the existence of a magnetic field around a magnet is by using a compass needle. This is nothing more than a small magnet mounted on a pivot so that it swings above a scale housed in a small cylindrical case which has a glass top. The end of the needle which points to the north is sometimes called the "blue" end.

To perform the experiment arrange for a bar magnet to have its marked end pointing to the north when it is placed along the edge of a sheet of drawing-paper as shown at Figure 89 B. Next place a compass needle near to the end of the bar magnet and when

the needle has stopped oscillating make a dot on the paper at each end of the needle. Then move the compass needle away from the magnet so that the end which was near the magnet is now over the second dot. Make a fresh dot at the other end of the needle. Move the needle again until this dot appears at the other end of the needle. Repeat this until the needle has reached the edge of the paper or the other end of the magnet. Then join the dots by a line, when you will have the directions of a line of force. Continue to get the directions of other lines of force in this way and, after having done so, the paper will present an appearance somewhat similar to that shown at Figure 89 B.

The point marked Nx is called the "Neutral point," and it is the point at which there is no magnetic effect, since at that point the field due to the magnet is neutralised by the field due to the earth. The explanation of this will follow in the next article.

REPORT OF THE MINISTRY OF HEALTH

THE issue of the Report of the Ministry of Health marks an event in each year, covering as it does an ever-increasing field. The subject in this ninth report of the greatest interest to our readers is Housing and Town Planning, and last week we gave the full statistics relating to these subjects; here it is only necessary to remark that the reduction in the rates of Exchequer grants as from September 30, 1927, appears to be a policy which has justified itself. It has not checked the provision of houses as was anticipated by opponents of the policy would be the case, and it has perhaps assisted the fall in the price of houses which the Ministry claimed it would effect, but the price of building materials has also fallen. The announcement of the proposed reduction beforehand created at first unusual activity in order to secure the full subsidy, a period of activity which was at first followed naturally by a slack period, but on the whole year the number of houses erected by local authorities and private enterprise, whether assisted or unassisted, showed an increase, the numbers being 238,914 as compared with 217,629, whilst the figures as to the cost of houses given for the last quarter of the year covered by this report after the reduction was effected show the following reduction, viz., a reduction in non-parlour houses of £39 and in parlour houses of £16. A non-parlour house is now estimated to cost £368 and a parlour house £437, but the problem of to-day appears still to be how to bring houses within the reach of the very poorest of the population, a problem accentuated by the steady rise in the rates experienced during past years. In the report the average rent of houses under the Housing and Town Planning Act, 1919, exclusive of rates, is given as 9s. 5d. per week, and with rates included it appears that taking the above cost of a non-parlour house it could hardly be let at a lower rent than 8s. 6d., if as low, and to reach the demand of the poorest paid in the population at least another half crown would have to come off.

If housing were an unsubsidised industry the position would be more satisfactory, but it is often forgotten that this is not the case, and that since the war, £63,534,657 has been paid by the Exchequer in subsidies, and that the subsidy is an increasing amount. In the year 1927-8 it was £9,540,966, and for the current year the estimate is £10,665,000. As we have given the full statistics relating to housing we turn to one or two other subjects dealt with in this report.

Housing (Rural Workers) Act.

We recently published an article explaining the provisions of this Act, and the report states that up to March 31 last assistance under the Act had been promised in respect of 334 dwellings, amounting to £25,313 by way of grant and £2,760 by way of loan, but it appears that work had been finished on but 44 dwellings.

Water Supply.

One of the most interesting sections of the report is that relating to water supply. The year 1927 was a wet year with an average rainfall over England and Wales 24 per cent. in excess of the average, and the years preceding that since the very dry year of 1921 have by no means been dry years, but from the report it appears that in some areas the local sources of supply from springs and underground waters are being utilised to their full extent and there is a growing tendency to resort to the lower course of rivers. The report states the success that has attended the methods employed by the Metropolitan Water Board in treating the water derived from such sources both as regards purification and finance. Other water undertakers in recent years have promoted Bills and obtained Acts enabling them to use river water, and these Acts contain provision to secure treatment of the water before use for domestic consumption. The report states that the average amount saved by the Metropolitan Water Board in pumping expenses by this method of treatment over seven years amounts approximately to £15,000 per annum.

In connection with such a subject as water supply financial considerations must be entirely secondary or they may give ground for suspicion, but the report gives another method of conserving supplies from existing sources without recourse to river water—the pooling of water resources of neighbouring water undertakers and the amalgamation of the undertakings under one administration which has been successfully adopted in certain areas. The report notes that the consumption of water for domestic purposes has grown considerably in recent years and is still growing, and states that this is not due only to increasing population but to changing habits and the demand for modern conveniences and improved sanitation — the substitution of water closets for more primitive conveniences and the provision of hot-water supplies both contributing to the increased use of water. But perhaps the most curious example of a cause for increased consumption is that the restrictions on the use of preservatives in food has brought the refrigerator into use, and certain types of refrigerators require a supply of running water, and the report states that probably in a medium-sized house the average quantity of water thus used during the year would be at least 100 gallons a day, an amount equivalent to the ordinary domestic consumption of a household of four persons. We note that the Metropolitan Water Board gives the daily consumption of water per head during the year 1927 at 36.35 gallons.

It appears to us that it may yet have to be proved that the refrigerator is an unmixed blessing incapable of abuse and that medical opinion will be awaited with interest on the question of the effects of too great a resort to frozen food in substitution for the really fresh article.

Local Authorities' Expenditure.

As so much more is always heard of expenditure paid out of taxation than local expenditure, we may conclude this very brief notice of the report with some of the figures relating to the expenditure of local authorities for the year under review. We find the total expenditure on maintenance and other expenses not being loan charges was £304,333,275. The loan charges were £68,776,348, bringing the total to £373,109,623. To this must be added the expenditure defrayed out of loans, £100,656,861, making the total £473,766,484, and the outstanding external loan debt is roughly £934,656,498. The balance of expenditure falling on the rates appears to be £161,624,521.

Full particulars of expenditure, etc., are given in the Appendix XV to the report, and we cannot but think that it would be to the public advantage if the same attention were given to, and interest taken in, this local budget as is shown in the case of the national Budget. The burdens imposed on industry under both budgets have much the same effect, and whilst strenuous efforts are made to reduce the National Debt, continuous demands are made for increased social services which must steadily increase the local debt.

AN OPEN LETTER

FROM THE PRESIDENT OF THE N.F.B.T.E.

WE have received the following letter from Mr. F. Thorne, President of the National Federation of Building Trades' Employers, in reply to the letter from Mr. Mark Powell, which appeared under the above title in our issue of August 31 :—

SIR,—I have seen the letter from Mr. Mark Powell which appeared recently in *The Builder* under the above title, and am glad that any after-dinner observations of mine moved him sufficiently to induce him to indite the communication in question. Seeing that it was an after-dinner occasion, however, when apocryphal stories are a well-recognised device wherewith to relieve the deadly dullness of a serious speech, I am surprised and amused that he should be in any doubt as to the jocular nature of the anecdote about the labourers in the trenches, at the end of half an hour, removing more material from their boots than they had thrown out during the previous half hour, and I sincerely hope his doubts have not been shared by any builders' labourers who may have chanced to see the anecdote in question.

Mr. Powell thinks that the system of payment by results has been renounced long ago. So far from that being the case there is, and has been during recent years, more building work done on the basis of bonus-on-output, which is a form of payment by results, than ever, and it is largely due to the extensive application of that system that working-class cottages have been built as cheaply as they have, and that the speculative building of middle-class houses has enjoyed the boom which has been so apparent during recent years.

As one who has been engaged for upwards of forty years in building work, first as an artisan and later as an employer, during which time I have had to earn my living on a payment-by-results basis, I am a thorough believer in the system of bonus-on-output carried on under proper conditions.

Any system, whether it involves payment by the hour or some form of payment by results, is capable of being abused, but it should be the business of organised bodies of employers and operatives to see that neither system is abused, and it is possible for such bodies to devise and operate piecework and bonus-on-output systems without detriment to anyone, and generally with advantage to all, as witness such industries as the cotton trade and the engineering trade.

Fortunately for the welfare and progress of humanity, men are born with different capacities for excelling in whatever walk in life they may follow. Why should not those who excel in output reap a direct reward for so excelling instead of only receiving the same payment per hour, whether they give proof of their power of excelling or not? Why should men be constrained to bury their talents by conforming to a dead level of output, the pace of which is necessarily set by the slowest unit? To me the hour system of payment is a deadening system unless it has superadded a system of adequate reward for any superior results achieved.

Mr. Powell seems to think that the savings which could be effected by increased production and thus lessening the cost of working-class cottages would be so infinitesimal as to be worthless. I would remind him of a verselet he doubtless learnt in his childhood, as I did, to the effect that "little drops of water, little grains of sand, make a mighty ocean and a wondrous land," and would add that the profits of the greatest businesses in the world are mostly built up out of infinitesimal margins of profit secured by the closest watchfulness at every stage of production.

But I do not agree that the saving would be as infinitesimal as he presupposes. I am told on good authority that a system of payment-by-results has been established in the building trade of Sweden with most remarkable results in the shape of increased wages to the operatives, diminished cost of construction, and increased profits as a consequence of the ample volume of trade which has resulted from the cheapened cost of building. I hope that the time is not

distant when full information will be available to us in regard to this Swedish development. That is the kind of reform, coupled with the adoption of some of the American building methods referred to by Mr. Bossom, which would have the most decisive effect upon the unemployment to which Mr. Powell so feelingly refers.

It is recognised that the building trade is one of the so-called sheltered industries enjoying a considerably higher hourly wages rate than is enjoyed by those staple industries of the country which have to hold their own against fierce foreign competition. The higher wages rate of a sheltered industry can only be justified by an output per hour so high as to place the unit cost of production for such an industry on a level comparable with the unit cost in an unsheltered industry. Unless such a superior output is achieved, the higher wages rate of such a sheltered industry is really being borne by the workers of the unsheltered industries who are thereby handicapped in their struggle to maintain their industry in the face of foreign competition.

FRED THORNE.

PYROXYLIN ENAMELS AND LACQUERS*

MOST of the opinions of the first edition of this book still hold good, particularly, perhaps, with respect to the rapid changes that are taking place in the art of finishing metal and wood surfaces. Decorators, and all engaged in similar work, will find this volume crammed full of useful information. There is no doubt, however, but that at present it must be considered very technical, *e.g.*, the following extracts are taken from page 11: "By treating cellulose material, such as paper, wood-pulp, or cotton with nitric and sulphuric acids a series of compounds are produced which are broadly and incorrectly termed nitro-celluloses." Also, "For practical purposes, cellulose may be considered as a complex alcohol, with three hydroxyl groups for each unit molecule." Who but the highly trained and technical man will be able to understand or derive help from information given along similar lines? True, we are looking forward to the day when our universities will be endowed with "Chairs of the Decorative Arts." Then the students, who are going to make this their life's occupation, will be expected to know and handle with dexterity the information given in a book of this kind.

It is acknowledged that industrial chemistry is developing almost phenomenally, and those engaged in the new arts of enamels and lacquers must keep up to date by becoming familiar with the growing mass of new information. Though the use of the air-brush, or aerograph, has been known to the artist for many years, it is only quite recently that its principle has been adopted by the painter and decorator. There is still room for someone to find out why the observation, that is vouchsafed for by leading painters and decorators, is so often heard, viz., that the body and the "stickability" of paint put on by the paint-spray is not the same as when it is put on by hand. Doubtless this will soon be solved, for it is becoming more and more the custom for manufacturing firms to have their own chemists and chemical laboratories, in which research work can be performed. It is here that the information given in this book is bound to be of use and interest.

Penge.—SCHOOL.—A new school is to be erected at Penge, S.E. for the Kent Education Committee. The plans have been prepared by the County Architect, Mr. W. H. Robinson.

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*PYROXYLIN ENAMELS AND LACQUERS. Their raw materials, manufacture, and application. Second Edition. By SAMUEL P. WILSON, M.A., Ph.D., Manager, Lacquer Plant, The Varnish Products Company, Cleveland, Ohio. (London: Messrs. Constable & Co., 10-12, Orange-street, W.C.2.) Price 12s. net.

NEW BUILDINGS IN LONDON

Blackheath. — CINEMA. — The Essandee Cinemas, Ltd., 47, Essex-street, Strand, W.C., have secured a site at the junction of Old Dover-road and St. John's Park-road, Blackheath, for a super-cinema to seat 3,000, and a terrace of shops and flats.

Bromley.—RECONSTRUCTION. — The Grand Cinema, Bromley, is to be reconstructed to provide accommodation for approximately 2,700 persons. Mr. F. C. Mitchell, L.R.I.B.A., 80, George-street, Portman-square, W.1, is the architect.

Commercial-road. — IMPROVEMENTS. — The contract for shop fronts, arcades and shop fittings to the new corner block of shops, Nos. 299 and 301, Commercial-road, E., for Messrs. W. Longuehaye & Co., Ltd., has been secured by Messrs. H. Mills & Sons, Ltd., Old-street. The general contractors are Messrs. Sims & Russell, of Westminster. Steelwork is by the Aston Construction Co., Ltd., and the wrot ironwork by Messrs. S. B. Goslin & Son, Artillery-lane. The architects are Messrs. A. S. R. Ley & Son, F. & A.R.I.B.A., 214, Bishopsgate, E.C.2.

Deptford.—HALL.—A new mission hall is to be erected at the junction of Boscawen-street and Elm-terrace, S.E. The application for this work has been submitted by Mr. F. S. Hammond, architect and surveyor, 20, Paper-street, E.C.1, and approved by the Deptford Borough Council.

Deptford.—ADDITIONS.—The London Markets, Ltd., of 111, Moorgate, E.C.2, are to erect additions to the market at No. 137, High-street, S.E.

Greenwich.—HOUSES.—About 80 additional residences are to be erected on the Charlton Park Estate, S.E., by Messrs. Adshead, Ltd., 89, Kingsway, W.C.2.

Grosvenor-street.—RECONSTRUCTION. — Mr. S. Wallbrook, estate agent, proposes to reconstruct the residences at Nos. 4 and 5, and to convert them into up-to-date shops and flats. The plans have been prepared by Messrs. Gordon, Jackson and Lambert, chartered architects, 7, Great James's-street, W.C.1, and have been approved by Sir Edwin Lutyens, R.A., acting as architect to the Duke of Westminster, the ground landlord.

Hammersmith.—REBUILDING.—Plans have been prepared for the rebuilding of the "Oxford and Cambridge" public-house in Hammersmith Bridge-road, W. 6, for Messrs. Charrington & Co., brewers. The architect is Mr. Francis Milton Cashmore, A.R.I.B.A., 2, Paul's Bakehouse-court, Godliman-street, E.C.4.

Holloway-road.—ALTERATIONS. — Additions and alterations are to be made to the premises at Nos. 59-65, for Messrs. Albert Baker and Co., Ltd., tobacconists. The builders are Messrs. W. Y. Smith and Co., 311, Hornsey-road, N., and the steelwork will be by Messrs. Archibald D. Dawnay and Sons, Ltd., Battersea, S.W.8. The architect is Mr. W. Riddle, Wallsend-on-Tyne.

King-street.—REBUILDING.—The Atlas Assurance Co. are shortly to vacate premises in King-street and Ironmonger-lane, E.C.2, in order that a start may be made upon the second portion of the company's proposed rebuilding scheme. The architect is Mr Michael Waterhouse, A.R.I.B.A., Staple Inn buildings, Holborn, W.C.2.

King William-street.—PREMISES.—A lease of 43 and 45, King William-street, 6, 8, 10 and 12, Monument-street, and 17, Fish-street-hill, E.C.4, has been acquired by Mr. R. Palumbo. The old buildings will be pulled down and a large block of banking and office premises erected. The architect is Mr. Charles Gordon Smith, F.S.I., 56, Cannon-street, E.C.4.

Lewisham.—CINEMA. — Messrs. Douglass Halse and Co., Ltd., builders, are to build a cinema at Nos. 11, 13 and 15, London-road, Lewisham, S.W.

Lewisham.—REBUILDING.—Mr. W. E. Challis has submitted an application to the local council for the rebuilding of the Rink Cinema, Lewisham.

London.—GARAGES.—In a paragraph last week, under the heading of Regent's Park and Victoria, we stated that Mr. S. Gordon Jeeves, A.R.I.B.A., is the architect for the garages that are about to be erected. We are informed that Messrs. Mewès & Davis, of 22, Conduit-street, W.1, are the architects. We regret that a mistake should have been made.

Mill-hill.—EXTENSIONS.—Additional accommodation is to be erected at the St. Joseph's College to the plans of Messrs. North, Robin and Wilsdon, F. and A.R.I.B.A., 35-39, Maddox-street, W.1.

Mortlake.—SHOWROOMS.—The Chestnuts, Upper Richmond-road, S.W., and 1-4, Chestnut-avenue, have been purchased by the Gas Light and Coke Co., Ltd., Horseferry-road, S.W. It is proposed to build branch showrooms in the near future.

Old-street.—OFFICES.—Messrs. Harry Neal Ltd., Northwood, Middlesex, have contracted to build the new warehouse and office premises at Nos. 252-264, for Messrs. Arthur Berton, Ltd. The plans have been prepared by Messrs. Herbert O. Ellis and Clarke, 3, Old Queen-street, S.W.1.

Oxford-circus.—BUILDING.—Provision is to be made for radio picture transmissions in the new B.B.C. building, which is to be erected near the Queen's Hall The main studio, where these transmissions will be given, will accommodate an audience of 1,000.

Park-lane.—STORES.—In connection with this scheme, Gamage (West End), Ltd., have an issue in the course of preparation for the erection of a large modern store in the West End. The site selected is the remainder of the island at the Marble Arch formed by Oxford-street, Park-lane, Park-street and Hereford-gardens.

Purley.—HALL.—The trustees of St. Mark's Church propose to build a new church hall, to seat about 200 persons, and later on a new church. Plans have been prepared by Mr. Sydney Jupp, F.R.I.B.A., 25, Sackville-street, W.1.

Seething-lane.—PREMISES.—A large block of office premises is to be built on the vacant site at the corner of Seething-lane and Crutched Friars, E.C.3, at a cost of approximately £100,000. The architect is Mr. Ernest G. W. Soustor, F.R.I.B.A., of St. James's-street, S.W.1.

Seven Sisters-road.—CINEMA.—£350,000 is the estimated cost of a new North London cinema which is to be erected on an island site between Isledon and Coleridge-roads on the Seven Sisters-road, near Finsbury Park Station. A dance hall with accommodation for 200 couples, an extensive tea-room and a club-room are included in the plans.

Smithfield.—ADDITIONS.—In the annual report of St. Bartholomew's Hospital it is stated that the governors have accepted the tender of Messrs. Dove Bros., Ltd., Islington, N.1, at £177,225, for the new surgical ward block and operating theatres. The architects are Messrs. Lanchester, Lucas and Lodge, 19, Bedford-square, W.C.

Stratford.—SPORTS GROUND.—The Stratford (East London) Arena of Sports Co. is acquiring about 20 acres of land for the erection of a large sports ground, etc., at about £300,000. The architects are Messrs. Elcock and Sutcliffe, FF.R.I.B.A., Avenue House, 21, Northumberland-avenue, W.C. 2.

Sutton.—PREMISES.—An incorrect paragraph appeared in our last issue under this heading. The scheme is for Messrs. Shinners, Ltd., and the name of the contractor is Mr. E. H. Smith, of Croydon, and Messrs. George Baines & Son, FF.R.I.B.A., 121, Victoria-street, are the architects.

Upper Tooting-road.—IMPROVEMENTS.—The Central Cinema, Upper Tooting-road, S.W., is to be enlarged.

Watford. — EXTENSIONS. — New Casuals' Wards are being built by Messrs. F. D. Hidden & Co., Ltd., builders, Brentford, for the Watford Union, to the plans of Messrs. Saxon Snell & Phillips, chartered architects. Messrs. Young & Co., 6, Queen Anne's-gate, S.W.1, are responsible for the constructional steelwork.

RATES OF WAGES IN THE BUILDING TRADE

[Every endeavour is made to ensure accuracy but we cannot be responsible for errors.]

	Masons.	Brick-layers.	Car-penters Joiners.	Plas-terers.	Slaters.	Plum-bers.	Pain-ters.	Lab-ourers.
Aberdare	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Accrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aldershot	1/3	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Alfreton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Alnwick	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Altrincham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashford Kent	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Ashington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ashton-under-Lyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Aylesbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Aylsham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Banbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Barnsley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barnstaple	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Barrow-in-Furness	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Barry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Basingstoke	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Bath	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bedford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Berwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bexhill	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bishop Auckland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackburn	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Blackpool	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bolton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bournemouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bradford	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bradford-on-Avon	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Braintree	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Bridlington	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Brighton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Bristol	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bromsgrove	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bromyard	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Bungay	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Burnley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Burton-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Bury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Buxton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Cambridge	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Canterbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Cardiff	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Carlisle	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chesterfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Chorley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cirencester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Clacton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Cranbrook	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cromer	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Darlington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Deal	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Denbigh	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Derby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Devizes	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dewsbury	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Doncaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Dorchester	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Dorking	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Dovercourt	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Driffield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Droitwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Eastbourne	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
E. Glam. (Mon.Val.)	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Ely	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Exeter	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/5½	1/2
Exmouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Fakenham	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Felixstowe	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Frome	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Glossop	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Godalming	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Goole	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Gosport	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Grimsby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Halifax	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harpenden	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Harrogate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hartlepools	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Harwich	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hatfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Hednesford	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Hereford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Herne Bay	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hertford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hitchin	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Hoddesdon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Holt	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Huddersfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hull	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Hunstanton	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Huntingdon	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Isle of Wight	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Ipswich	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Keighley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Kettering	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Kidderminster	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
King's Lynn	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Lancaster	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leicester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Leighton-Buzzard	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lincoln	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Littlehampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llandudno	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Llanelly	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
London:								
12 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
12-15 m. radius	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Loughborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Lowestoft	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Macclesfield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Malvern	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Manchester	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Mansfield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Margate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Market Harb'rough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Matlock	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Melton Constable	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Melton Mowbray	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Merthyr Tydfil	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Middlesbrough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newark	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Newbury	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Newcastle-on-Tyne	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Newcastle-ur-Lyme	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
New Forest	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newmarket	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Newport, Mon.	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Nottingham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Nuneaton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Paignton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Peterborough	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Pontypridd	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Portsmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Preston	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Ramsgate	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Redcar	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Redditch	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Reigate	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Retford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Ripon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Rugby	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Saffron Walden	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
St. Helens	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sawbridgeworth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Saxmundham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Sevenoaks	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Sheffield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Sittingbourne	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
South Shields	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stevenage	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Stockport	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stockton-on-Tees	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stoke-on-Trent	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Stourbridge	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stourport	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Stowmarket	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Stratford-on-Avon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/4½	1/0½
Sunderland	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swaffham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Swansea	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Swindon	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/1½
Tamworth	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Thetford	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Torquay	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Totnes	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4	1/0½
Trowbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/3	1/0
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Uttoxeter	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/0½
Wakefield	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wallsend	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warminster	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Warrington	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Warwick	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wells (Norfolk)	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Welwyn Gar. City	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
West Bromwich	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Weston-sup.-Mare	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Weymouth	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/0½
Whitby	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Wigan	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Winchester	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wisbech	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Wolverhampton	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Woodbridge	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worksop	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Worthing	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Wrexham	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Wroxham	1/3	1/3	1/3	1/3	1/3	1/3	1/3	11½
Wymondham	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	11½
York	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½

For rates of wages in the Building Trade in Scotland, see page 446.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

SEPTEMBER 17.

Athy.—Residence.—Sundry structural alterations and improvements at Christian Brothers' Residence, Athy, Co. Kildare, for Rev. Brother P. V Dolan, Superior. G. L. O'Connor, F.R.I.B.A., architect, Mansion House-chambers, 27, Dawson-st., Dublin.

Aylesham.—Central School.—Erection of, for the Kent Education Committee. Director of Education, Springfield, Maidstone, Kent. Dep. £2 2s.

Belfast.—Building.—Post Office, garage, workshops, etc., at West-st., Millfield, for Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall Square West, Belfast. Dep. £1.

Belfast.—Building.—Storm water pumping station, including pump wells, channels, discharge culvert, and superstructure, and other works in connection therewith, for C. B. A. Brookes, F.S.I., chartered surveyor, 17, Chichester-st. Dep. £5 5s.

Bembridge (I. of W.).—Additions.—To Church Schools. E. L. Smith, architect, Melville-chambers, Sandown. Dep. £1 1s.

Bredbury and Romiley.—Houses.—36, on housing scheme, Cherry Tree site, Romily, for U.D.C. Thorpe & Collier, I.R.I.B.A., chartered architects, of 66a, Deansgate, Manchester. Dep. £1 1s.

Burma.—Foundations.—Sinking of bridge pier foundations in the River Irrawaddy at Sagaing, Burma, for Burma Railway Co., Ltd. R. G. McGechie, secretary, 199, Gresham House, Old Broad-st., E.C.2.

Camborne.—Houses.—50 non-parlour, for U.D.C. S.

Camelford.—House.—Ten-roomed house at Trevia. H. Pethick, Mill House.

Coventry.—Heating, etc.—Heating and hot water service at new Nurses' Home, at Gulson-rd. Hospital, for B.G. Edwards & Shaw, consulting engineers, 105, Colmore-row, Birmingham. Dep. £3 3s.

Croydon.—Shops and Dwellings.—Erection of one block of 8 shops and dwellings, for the C.B. The Town Clerk, Town Hall, Croydon. Dep. £3 3s.

Dewsbury.—Extensions.—To covered market, for C.B. H. Dearden, A.R.I.B.A., B.S.

Elion.—Repairing.—Church, Manse and Offices for Church of Scotland. G. Bennett Mitchell, architect, 1, West Craibstone-st., Aberdeen.

Hampton.—Fencing.—1,100 lin. yds. of unclimbable iron fencing, gates, etc., at Recreation Grounds, for U.D.C. S. H. Chambers, S.

Keynsham.—Painting.—Also repairs to (a) 8 non-parlour houses at Whitchurch, and (b) 8 non-parlour houses at Saltford, for R.D.C. H. W. Argile, building surveyor, 16, High-st.

Killanny.—Building.—New stone-built entrance to new church, Killanny, near Carrickmacross, for Rev. T. Brennan, P.P. R. M. Butler, F.R.I.B.A., architect, 23, Kildare-st., Dublin.

Norwich.—Shops.—14 shops, with flats over, on Drayton housing estate, for T.C. J. S. Bullough, City Engineer. Dep. £5.

Nottingham.—Heating.—And hot water supply plant, at Nurses' Home, Bagthorpe Infirmary, Hucknall-rd., Nottingham, for the Guardians of the Poor. T. J. R. Kiernan, B.Sc., M.Inst.E., 17, Victoria-st., Westminster, S.W.1. Dep. £5 (B.E. note).

Nottingham.—Hospital.—Erection of Children's Hospital, Bagthorpe Infirmary, Hucknall-rd., Nottingham, for B.G. Starr & Hall, 12, Victoria-st., Nottingham. Dep. £5 note.

Nottingham.—Painting.—Interior cleaning and painting of Scattered Homes and Central Home, Hartley-rd., for T.C. J. A. Battersby, clerk.

Paulton.—Heating.—Installing 134 electric lighting and heating points at Isolation Hospital, for Bath, Clutton, Midsomer Norton and Radstock Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., 14, Queen-sq., Bath.

Paulton.—Hospital.—Isolation Hospital at Paulton, near Bristol, comprising administration, scarlet fever, diphtheria, observation, laundry and disinfecting blocks, together with roads, drains, fences, etc., for Bath, Clutton, Midsomer Norton and Radstock Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., 14, Queen-sq., Bath. Dep. £2 2s.

Penge, S.E.—Secondary School for Boys.—Erection of, for the Kent Education Committee. Director of Education, Springfield, Maidstone, Kent. Dep. £2 2s.

Plymouth.—Repairs.—To premises at 14, Albert-rd., and 25, 26, 27 and 28, Lower Batter-st., for C.B. R. J. Fittall, T.C.

Pontypridd.—Extensions.—Also alterations to casual wards of Central Homes, for B.G. W. Spickett, clerk. Dep. £2 2s.

Poole.—Building.—Setting a Cornish boiler, 6 ft. diameter, at the Poor Law Institution, Longfleet-gardens, for B.G. A. J. H. Pearce, clerk, 217, High-st.

Pudsey.—Bath.—Swimming bath, for T.C. B. H. Noble, B.S. Dep. £1.

St. Helens (I. of W.).—Houses.—6 non-parlour type houses at St. Michael's-rd., for U.D.C. L. F. Phillips, clerk, Alexandra-rd., High Park, Ryde, I W.

Shardlow.—Houses.—Additional non-parlour type houses in their area:—Spondon, 112; Sandiacre, 24; Chellaston, 6; Draycott, 20; Ockbrook, 34; Sawley, 4, for R.D.C. J. S. Wooddisse, S., 4, Full-st., Derby. Dep. £2 2s.

Southampton.—Parapets to Bridges.—Erection of ashlar and moulded artificial stone parapets to bridges and approaches at Totton-Redbridge Diversion, for the Southampton C.C. W. J. Taylor, County Surveyor, The Castle, Winchester. Dep. £2 2s. by cheque to the Hampshire C.C.

Willingford.—Houses.—3 pairs at North Moreton, for R.D.C. F. H. Floyd, F.R.I.B.A., 20, Market-place, Newbury. Dep. £1 1s.

SEPTEMBER 18.

Belfast.—Improvements.—Boundary walls, gates and railings in connection with widening of University and Malone roads, at the properties known as "Coolavin," "Cherryhill," "Carlton House," and "Dunraven House," for C.B. City S. Dep. £1 1s.

Bootle.—Convenience.—Ladies' and gentlemen's convenience, in north-east corner of North Recreation Ground, near junction of Stanley-rd. and Knowsley-rd., for C.B. B.E.

Bootle.—Houses.—100, in pairs, on new roads, Site No. 2, Park-lane and Orrell-rd., for C.B. B.E. & S. Dep. £2 2s.

Brighton.—Improvements, etc.—Formation of six cubicles in large dormitory of the 1 receiving home at Warren Farm schools, for D.C. E. Wallis Long, architect, 6, Old Steine.

Cardiff.—Flats.—Four blocks of flats on Leckwith-rd., for T.C. City E. Dep. £2 2s.

Central Scotland.—Electricity Scheme.—Electricity sub-stations at Clydes Mill, Dalmarnock and Bonnybridge, for Electricity Board. J. R. Brooke, secretary, Trafalgar-buildings, 1, Charing Cross, London, W.C.2. Dep. £2 2s.

Cork.—Church.—New Church of "Christ King," at Evergreen-rd., Turner's Cross, for Rev. D. Cohalan, D.D., Lord Bishop of Cork. J. R. Boyd Barrett, A.R.I.B.A., 61, South Mall. Dep. £5 5s.

Dewsbury.—Pointing.—At Staincliffe Institution, for B.G. E. T. Tunnicliffe, clerk, Wellington-st.

Epsom.—Extensions.—To the buildings and other works at the Electricity Works, for the Epsom U.D.C. A. C. Williams & Pettett, architects, Reid's Building, Ashley-rd., Epsom. Dep. £2 2s.

Fishguard.—House.—On Penslade, Fishguard. E. M. Thomas, Goodwick House, Fishguard.

Leeds.—Building.—For (*a*) alterations to kitchen at mental wards; (*b*) two iron emergency staircases at the mental wards, at St. James' Hospital, Beckett-st., for T.C. James H. Ford, clerk, 11, South-parade.

Leeds.—Painting.—Outside at Institution, Beckett-st., for B.G. Jas. H. Ford, clerk, 11, South-parade.

Reading.—Garage.—At Corporation Depot, Abattoirs-rd., for C.B. B.S. Dep. £2 2s.

Richmond, Surrey.—Conveniences.—In the Terrace Gardens, Richmond-hill, for T.C. B.E., Town Hall, Richmond, Surrey. Dep. £1 1s.

Sheffield.—Houses.—For 10 non-parlour type, on Norwood estate (building scheme No. 3); 14 parlour type on Dykes Hall estate (building scheme No. 3), for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

Stockton-on-Tees.—Houses.—Erection of 178 on the Blue Hall estate, Norton, for the Corporation. Hays & Gray, architects, Wingate, Co. Durham.

Wealdstone (Middlesex).—Houses.—Erection of 164 houses on the Elmgrove-rd. housing site, for the U.D.C. Surveyor to the Council, Council Offices, Peel-rd., Wealdstone. Dep. £2 2s.

Yiewsley.—Painting.—Exterior of 50 houses; redecorating interior of 50 kitchens and sculleries, and also passages, staircases and 1 bedroom of 208 houses, for U.D.C. W. H. Lea, clerk.

SEPTEMBER 19.

Eastbourne.—Houses.—38 on Victoria-drive Housing site, for T.C. L. Roseveare, B.E. Dep. £2 2s.

Fife.—Additions.—To Elie public school, for E.C. G. Sandilands, Architect and Master of Works, Education Offices, Kirkcaldy. Dep. £1 1s.

Glasgow.—Exchange.—Telephone exchange at Muirend, for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1 1s.

Harrogate.—Conveniences.—In Valley-gardens, for T.C. C. E. Rivers, B.E.

Little Thurrock.—Houses.—Erection of 30 houses for the Orsett R.D.C. Engineer and Surveyor, Council Offices, Palmers-av., Grays, Essex.

Manchester.—Painting.—Interiors of Longsight and West Gorton branch libraries, for T.C. City Architect. Dep. 10s. 6d. each.

Mansfield.—Houses.—Erection and completion of 53 houses in pairs and blocks of three, four and five, for the T.C. Waude Thompson, B.E. & S., Market-st., Mansfield. Dep. £2 2s.

Mansfield.—Shops and Offices.—Erection of 2 shops and offices, for the T.C. Waude Thompson, M.Inst.C.E., Borough Engineer and S., Market-st., Mansfield. Dep. £2 2s.

Mediar-with-Wesham.—Building.—Fire station, for D.C. F. Taylor, clerk, Wesham, Kirkham. Dep. £1 1s.

Morley.—Buildings.—Two underground transformer stations for T.C. F. Turner, B.E.

Nottingham.—Houses.—1,200 of small type on Aspley-lane site, for T.C. T. Cecil Howitt, Architect, 58-59, Long-row. Dep. £1.

Richmond Park.—Rebuilding portions of the boundary wall, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

Swansea.—Houses.—Gorseinon, 2; Gowerton, 18; Loughor, 12; Pontardulais, 16; Pontlliw, 4; for R.D.C. J. Teiflon J. Williams, Lic.R.I.B.A., 3, Temple-buildings, Goat-st. Dep. £2 2s.

Wakefield.—Annexe.—Sanitary annexe at Wakefield Mental Hospital, for West Riding Hospitals Mental Board. W. E. H. Burton, architect and engineer. Dep. £1.

York.—Cowhouse.—At Foss Farm, Acaster Malbis, near York, for West Riding C.C. County Land Agent, County Hall, Wakefield.

SEPTEMBER 20.

Aldingbourne.—Tower.—Water softening plant and storage tower at Aldingbourne Hospital, near Chichester, for West Sussex C.C. Haydn P. Roberts, F.R.I.B.A., C.A., Fernleigh, North-st., Chichester.

Bangor.—Offices.—For gas undertaking in High-st., for T.C. B.S. Dep. £1 1s.

Belfast.—Barracks.—Seven standard-type barracks for the Royal Uuster Constabulary, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-sq. West, Belfast. Dep. £1 each.

Bridlington.—Extensions.—To Yorkshire Foresters' orphanage and convalescent home, St. John's-av. J. R. Earnshaw, architect, Kingsgate.

Durrington.—Centre.—Special subjects centre at Council school, for Wilts E.C. T. Walker, C.A., Trowbridge. Dep. £1 1s.

East Elloe.—Houses.—9 pairs of cottages on site at corner of main Long Sutton—Sutton Bridge-rd. and the Hospital Drive in Little Sutton, for R.D.C. S. S. Mossop, Jr., clerk, Holbeach.

Ely.—Wards.—Isolation wards at Poor-law Institution, for B.G. F. W. Green, clerk, 11, Lynn-rd.

Glasgow.—Railings.—For (1) Iron railings and gates, and (2) Chestnut fencing, at Balmore and Parkhouse Housing schemes, for T.C. D. Stenhouse, T.C.

Hartley Wintney.—Houses.—Ten semi-detached cottages at Coldharbour-lane, Hawley, for R.D.C. E. H. Milburn, clerk. Dep. £1.

Hebden Bridge.—Post office and Telephone Exchange.—Erection of, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

Southwell.—Wiring.—For electric light at Union, for B.G. Sands & Walker, engineers, Milton chambers, Milton-st., Nottingham.

Tunbridge Wells.—Houses.—Sixteen pairs of two-bedroomed houses proposed to be erected in Holmewood-rd., for T.C. W. H. Maxwell, Borough and Water Engineer.

SEPTEMBER 21.

Alloa.—Houses.—For 106 houses at West Ashley-terrace, etc., for T.C. J. Melvin & Son, architects, Mar-st.

Eastbourne.—Alterations.—Also additions to Grove-rd. Fire Station, for C.B. L. Roseveare, B.E., & S. Dep. £1 1s.

East Malling.—Fruit Storage Testing Station.—Erection of, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

Elworth.—Additions.—Also alterations to Sunday school, etc., at Elworth, near Sandbach, for United Methodist Church. A. Price & Sons, architects and surveyors, Sandbach.

Northampton.—Houses.—40 parlour and 16 non-parlour type houses upon St. David's estate, Kingsthorpe, for C.B. A. Fidler, B.E. Dep. £5.

Remenham.—Installation.—Of electric lighting at Church and Parish Hall, for Parish Council. S. C. Rees-Jones, chairman, Remenham Church, Henley-on-Thames.

Rochdale.—Alterations.—To the old Post Office, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

SEPTEMBER 22.

Enniskillen.—Building.—New buildings at Convent of Mercy, Enniskillen. J. Donnelly, architect, Enniskillen.

Farnborough.—Building.—Stables, cartsheds and stores, together with accessory works, in connection with proposed Town Depot at Sycamore-rd., for U.D.C. J. E. Hargreaves, S.

Knaresborough.—Heating, etc.—Steam heating and hot water supplies and erection of central station at Poor Law Institution, for B.G. J. Roger Preston, consulting engineer, 7, Southampton-st., Bloomsbury-sq., London, W.C.1, for engineering work, and S. Blenkhorn, architect, Westminster Bank-chambers, High-st., Knaresborough, with regard to Central Station. Dep. £3 3s.

Smethwick.—New Distributing Station and Workshops.—Erection of, for the County Borough Gas Dept. Engineer and Manager, Gas Works, Rabone-lane. Dep. £2 2s.

Staines.—Houses.—Erection of 14, at Woodthorpe-rd., Ashford, for the Staines R.D.C. D. C. Fidler, S. London-rd., Ashford, Middlesex. Dep. £2 2s.

Wakefield.—Painting.—Internal, at County Hall, for West Riding C.C. West Riding Architect.

SEPTEMBER 24.

Ellesmere Port.—Houses.—232 semi-detached, on Grange Farm estate, for U.D.C. T. W. Francis, clerk. Dep. £5 5s.

Guildford.—Cottages.—Eight non-parlour type, at East Horsley, for R.D.C. J. W. Wilton, S. Dep. £2.

Larne.—Building.—In connection with conversion of Workhouse Buildings into a District Hospital, for B.G. J. A. Hanna, architect & civil engineer, 29, Wellington-place, Belfast. Dep. £2 2s.

Manchester. — Garage. — Motor-bus garage at Princess-rd. car depot, for T.C. City Architect. Dep. £2 2s.

Manchester.—Painting.—Exterior at Crumpsall Institution, Crumpsall, for B.G. E. Hargreaves, Superintendent of Works, Union Offices, All Saints.

Menston.—Residence.—At mental hospital, near Leeds, for West Riding C.C. W. E. H. Burton, architect and engineer, West Riding Mental Hospitals Board Offices, Wakefield. Dep. £1.

Morley.—Houses.—13 on Bradford and Wakefield-site, for T.C. F. Turner, B.E. & S. Dep. £2 2s.

Whitby.—Reinforced Concrete Roof.—Construction of, to new bathing pool, for the U.D.C. F. H. Wood, P.A.S.I., Gloucester House, 19, Charing Cross-rd., London, W.C.2. Dep £2 2s.

Reading.—Building.—Offices, traders' rooms and conveniences at Cattle Market, Great Knollys-st., for C.B. B.S. Dep. £1 1s.

St. Helens.—School.—Recreation room, school and concert hall at Eccleston Hall Sanatorium, for C.B. A. W. Bradley, Borough and Water Engineer. Dep. £1 1s.

Waterloo-with-Seaforth. — Reconstruction. — Of a portion of Crosby-rd., for U.D.C. J. R. Fothergill, E. and S.

Waterloo-with-Seaforth.—Widening.—Taking down and re-erection of certain boundary walls in Crosby-rd. between South-rd. and Cambridge-rd., Waterloo, for U.D.C. J. R. Fothergill, E. and S.

SEPTEMBER 25.

Cork.—Building.—Provision of clothes' stores, arms racks, etc., at Command Stores, Collins Barracks, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works, Dublin. Dep. £1.

Devon.—Houses.—Burlescombe, 2 for roadmen; Colyton, 2 for roadmen; Fremington, 1 for roadman; Galmpton, 1 for roadman; Great Torrington, 2 for roadmen, and Okehampton, 4 for roadmen, for C.C. C.A., 97, Heavitree-rd., Exeter.

Kilkenny.—Houses.—17 cottages at Kenny's Well, and 13 at Stephen's-st., for Corporation. R. C. Murphy, B.S. Dep. £2.

Portsmouth.—Alterations.—To P.O. Engineers' Stores, Flathouse-rd., Portsmouth, for the Commissioners H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

SEPTEMBER 26.

Aberdare.—Employment Exchange.—Erection of, at Aberdare, for the Commissioners H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

Blackwood.—Premises.—Shop premises at Blackwood, Mon., for Messrs. Edmunds, D. J. Thomas, L.R.I.B.A., architect and surveyor, High-st., Blackwood, Mon. Dep. £2 2s.

Drumkeerin.—Adaption.—Of building for Garda Siochana, at Drumkeerin, Co. Leitrim, for Commissioners of Public Works. T. Cassedy, secretary. Office of Public Works, Dublin. Dep. £1.

Hackney.—Maisonettes.—Erection of 80, for the Borough Council. Percival Holt, M.Inst.C.E., Borough Engineer and Surveyor, Town Hall, Hackney, E.8. Dep. £10.

Rochdale.—Painting.—External painting work required to 148 houses on Kilworth-st. estate; 36 houses on Ivor-st. estate; and 2 steel houses at Marland, for C.B. B.S.

SEPTEMER 27.

Baddiley, Cheshire.—House, etc.—Construction of (*a*) a dwelling-house, and (*b*) engine and filter buildings, in connection with the waterworks undertaking, in Baddiley, for Nantwich U.D.C. P. H. Paton, chartered civil engineer, 25, Barker-st., Nantwich. Dep. £2 2s.

Kingston-upon-Hull.—Flooring.—For concrete ash pits, flooring, etc., and pilot cable room, etc., for T.C. H. Bell, City Electrical Engineer and Manager. Dep. £1 1s. each.

Manchester.—Building.—Materials required in excavating for and building concrete structure for supporting a gasholder at Bradford-rd. works, for T.C. J. H. Sillitoe, general manager and secretary, Gas Department.

Nantwich.—Building.—(*a*) House, and (*b*) engine and filter buildings in connection with waterworks undertaking, in Parish of Baddiley, for U.D.C. P. H. Paton, chartered civil engineer, 25, Parker-st. Dep. £2 2s.

SEPTEMBER 28.

Wantage.—School.—Erection of, for the Berkshire Education Committee. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Dep. £2 2s.

SEPTEMBER 29.

Nottingham.—Cottages.—Two pairs of labourer's cottages on Bingham estate, for Crown Receivers. J. Carter Jonas & Sons, Crown Receivers, 8, Suffolk-st., Pall Mall East, London, S.W.1. Dep. £1 1s.

St. Albans.—Improvements.—For (1) alterations and additions to administrative block, and (2) wiring, etc., throughout for electric light, at Sisters' Infectious Hospital, Folly Mead, for T.C. F. T. Negus, City E. and S., 38, St. Peter's-st.

Swanage.—Houses.—30, in pairs, on housing site at Herston, for U.D.C. F. Camble, S.

OCTOBER 1.

Glasgow.—Painting.—Painter work of several buildings, etc., comprising contracts Nos. 1 and 2 in connection with erection of Mearnskirk Sanatorium, Newton Mearns, Renfrewshire, for T.C. D. Stenhouse, T.C.

Leigh-on-Sea.—Public Conveniences.—Erection of, for the C.B. of Southend. R. H. Dyer, Borough Engineer, Municipal Buildings, Southend-on-Sea. Dep. £2.

London.—Dwellings.—(1 Erection of five blocks at Hughes Fields estate, Deptford, and Greenwich; (2) two blocks of dwellings and other incidental works at Comber estate, Wyndham-rd., Camberwell, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Dep. £2 in each case.

London, W.C.1.—Motor Garage.—Erection and completion of, in Goldsmith-st., W.C.2, for the Holborn B.C. J. E. Parr, A.M.Inst.C.E. B.S., Town Hall, High Holborn, W.C.1. Dep. £2 2s.

OCTOBER 2.

***Bulwell, Nottingham.**—Telephone Exchange. Erection of, for H.M.O.W. Contracts Dept., King Charles-st., London, S.W.1. Dep. £1 1s.

OCTOBER 3.

***Aberdare.**—Employment Exchange.—Erection of, at Aberdare, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-st., S.W.1. Dep. £1 1s.

Dublin.—Houses.—66, for Irish Sailors and Soldiers Land Trust. Chief Clerk, 50, Upper Mount-st. Dep. £5 5s.

***Whitehall, S.W.**—Telephone Exchange.—Erection of, for H.M.O.W. Contracts Dept., King Charles-st., London, S.W.1. Dep. £1 1s.

OCTOBER 4.

***London.**—Telephone Exchange.—Erection of, at Acton, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

***Ramsgate.**—Houses.—Erection of 20 non-parlour type houses on the Margate-rd. housing site, for the Corporation. Borough Engineer, Borough Engineer's Office, 16, Albion-place, Ramsgate..

OCTOBER 5.

***Harrow.**—Painting, etc.—At the H.M. Stationery Office, Harrow, for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

***London.**—Painting.—At H.M. Stationery Office, Chancery-lane, W.C., for the Commissioners, H.M.O.W. Contracts Branch, King Charles-st., Westminster, S.W.1. Dep. £1 1s.

NO DATE.

Aylesbury.—Wards.—New tramp wards at Poor Law Institution, for B.G. Taylor & White, A.R.I.B.A., 7, Bourbon-st. Dep. £2 2s.

Durham.—Alterations.—To Gilesgate branch, for Durham Co-operative Society, Ltd. C.W.S. Architect's Dept., 90, Westmorland-rd., Newcastle.

Harrogate.—Shed.—Steel framed corrugated iron sheet shed for covering in whole of tarmacadam and crushing plant, at Duck-st. Quarry, and also for garage and storeroom with wood frame, covered with weather-proof creosoted boards, for Council. Highway Surveyor, Pateley Bridge, near Harrogate.

Inverugie.—House.—Dwelling-house at Mains of Inverugie. A. & J. Webster, Ltd., 11, York-st.

Kettering.—Cottages.—12 cottages in parish of Broughton, for R.D.C. J. T. Blackwell, architect. Gold Street-chambers.

Macclesfield.—Alterations.—Also extensions to latrines and new drainage system, etc., at St. Paul's School. F. C. Sheldon, architect, 7a, King Edward-st.

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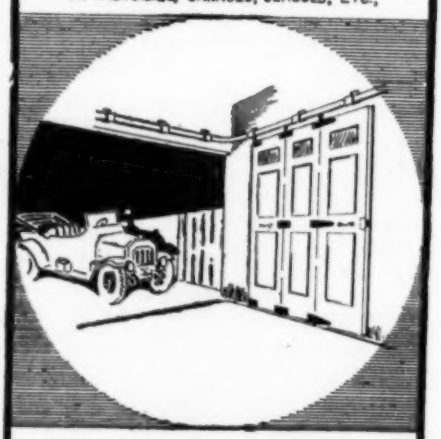

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WRITE FOR BOUND CATALOGUE B.26 TO-

P.C. HENDERSON, LIMITED.

TANGENT WORKS, BARKING, ESSEX.

Norden (Lancs).—Reflooring.—Of assembly room and other repairs at Liberal Club. Secretary.

Portmadoc. — Alterations. — Also additions to Madoc Memorial Hospital. R. D. Jones, chartered architect, 3, High-st., Pwllheli.

Rumney.—Chapel.—New Wesleyan school-chapel at Rumney. Henry Budgen & Co., 95, St. Mary-st., Cardiff. Dep. £2 2s.

Southport.—Electric Lighting.—Installation at Ainsdale Branch Library, Ainsdale. Borough Electrical Engineer, 188, Lord-st.

Sunderland.—Painting.—Outside of Villette Social Club premises. Secretary, 1, Robinson-ter.

MATERIALS, etc.

SEPTEMBER 17.

Bradford.—Building Materials.—For T.C. E. J. Sutcliffe, Gas Engineer.

Brighton.—Builder's Materials.—For B.G. H. Burfield, clerk, Prince's-st.

Edmonton.—Builder's Materials.—For B.G. E. Ridley, clerk, 77, Bridport-rd.

Ipswich.—Painter's Materials, etc.—For B.G. L. W. Greenhalgh, clerk, 19, Tower-st.

SEPTEMBER 19.

Dublin.—Builder's Materials.—For B.G. J. P. Condon, clerk, 1, James's-st.

Liverpool.—Building Materials.—For T.C. Green & Highfield Estates. Acting Director of Housing.

London.—Builder's Materials.—For Woolwich B.G. A. Holder, clerk.

Manchester.—Pipes.—7,200 lin. yds. of 6-in. socket and spigot pipes (cast-iron or steel), 8,100 lin. yds. of 4-in. same, for Corporation. Engineer, Waterworks Offices.

SEPTEMBER 20.

Birmingham.—Portland Cement.—For T.C. H. H. Humphries, City E. & S.

Newburn.—Road Materials.—For U.D.C. T. Gregory, S.

North Surrey.—Builder's Materials.—For School District. W. Eric Jackson, clerk to Managers, 22, Northwood-rd., S.E.23.

Oldbury.—Highway Materials.—For U.D.C. W. Greenwood, E. and S.

SEPTEMBER 27.

Birkenhead.—Builders' Materials, etc.—For Mersey Railway Co. J. Shaw, general manager and secretary, Central Station.

Bodmin.—Builder's Materials, etc.—For Cornwall Mental Hospital. A. F. Hughes, Steward.

SEPTEMBER 22.

Birkenhead.—Paints, etc.—For B.G. S. F. Carter, clerk, Conway-st.

Stafford.—Highway Materials.—For T.C. W. Plant, B.E.

SEPTEMBER 25.

Atherton.—Granite Setts.—320 tons, for U.D.C. F. L. Boydell, S.

SEPTEMBER 26.

Plymouth.—Cement.—For C.B. R. J. Bittall, T.C.

SEPTEMBER 29.

Edinburgh.—Paints, etc.—For Midlothian and Peebles District Asylum, Rosslynlee. C. L. Addison-Smith, clerk, 19, Heriot-row, Edinburgh.

OCTOBER 3.

Bromley.—Slag.—1,000 tons tarred slag or granite macadam, for R.D.C. L. O. Wall, clerk.

NO DATE.

Dundee.—Blocks.—Creosoted deal paving blocks, for T.C. G. Baxter, City E.

ENGINEERING, IRON AND STEEL.

SEPTEMBER 17.

Chard.—Waterworks.—6,550 yds. of 5 in., 4 in., and 3 in. cast iron water mains, with necessary valves, hydrants, etc., motor and pump house, reservoir, electric motors, and well pumps, and other works, for Corporation. S. R. Lowcock, 6 Queen Anne's Gate, S.W.1. Dep. £5.

Burma.—Steelwork.—507.6 tons of structural steelwork, for Railway Company, Ltd. R. G. McGeorge, secretary, 199, Gresham House, Old Broad-st., London, E.C.2.

Denbighshire. — Improvements. — Widening in masonry of, and improvement of, the road over and approaches to culvert known as Pont-y-Pacwn, near Llanferres, for C.C. E. A. Evans, County Engineer, 46, Clwyd-st., Ruthin. Dep. £2 2s.

Haverfordwest. — Reservoir. — Mass-concrete covered service reservoir of about 180,000 gallons capacity, and about 1,000 lineal yards of 6 in. diameter cast-iron water mains, for the T.C. Thomas & Morgan & Partners, 23, Gelli Wastad-rd., Pontypridd. Dep. £5 5s.

Madras.—Steelwork.—95 tons structural steelwork for engine paint and valve shop, together with asbestos sheeting, patent glazing, C.I. piping, etc., etc., for Madras and Southern Mahratta Railway Co., Ltd. Directors, 25, Buckingham Palace-rd., S.W.1.

SEPTEMBER 18.

Hebden Bridge.—Additions.—To Heptonstall sewage works at Kingdom Field, comprising alteration of existing septic tanks and construction of storm-overflow chambers, dosing chamber, percolating bed (30 ft. diameter), humus tank and drainer, sludge drainers, sludge effluent filter, roadway, drains, etc. C. H. Marriott, Son & Shaw, engineer, Church Street-chambers, Dewsbury. Dep. £1 1s.

Todmorden.—Sewage.—Additions to Heptonstall sewage works at Kingdom Field, Hebden Bridge, for R.D.C. C. H. Marriott, Son & Shaw, engineers, Church-st. Chambers, Dewsbury. Dep. £1 1s.

SEPTEMBER 20.

Bishopthorpe.—Sewerage.—Providing and laying of 1,500 lin. yds. of 6 in. stoneware pipe sewers; together with necessary manholes, flushing manholes, storm overflow, ventilators, etc.; construction of a brick pumpwell and pump house, and installation therein of duplicate pumping plant, and construction of sewage disposal works, consisting of settling tanks, filter, etc., in mass concrete, at Copmanthorpe, for R.D.C. Fairbank & Son, engineers, Tudor House, Stonegate, York. Dep. £2 2s.

Monaghan.—Main.—Supplying and laying of a 4-inch water main and erection of a low-level storage tank, at Mental Hospital, for Governors. Thomas Gallagher, clerk.

SEPTEMBER 21.

London.—Roofing.—For platform roofing, for South Indian Railway Co., Ltd. Robert White & Partners, consulting engineers, 3, Victoria-st., Westminster, S.W.1.

SEPTEMBER 22.

Malmesbury.—Reconstruction.—Of Cowbridge Bridge, near Malmesbury, for Wilts C.C. H. S. Ganderton, C.S., Trowbridge. Dep. £2 2s.

SEPTEMBER 24.

Antwerp.—Bridges.—Two bridges over entrance between Bassin Kattendyk and Bassin aux Bois, for Corporation. Department of Overseas Trade, 35, Old Queen-st., S.W.1. . (Ref. A.X. 6552.)

Manchester.—Widening.—Of bridge at St. Werburgh's-rd., Chorlton-cum-Hardy, over Cheshire Lines Railway, for Corporation. City E. Dep. £3 3s.

SEPTEMBER 28.

Thropston.—Water Supply.—Laying and jointing 6,700 yds. of 5-inch, 4-inch, and 3-inch diameter cast-iron water main, with valves and fittings, and construction of covered service reservoir, well and pumping station, etc., for R.D.C. Pick, Everard, Keay & Gimson, engineers, 6, Millstone-lane, Leicester. Dep. £1 1s.

OCTOBER 1.

Copenhagen.—Bridge.—Highway and railway bridge across Lillebelt, for Danish State Railways. Chief of Department of Way and Works, Copenhagen or Danish Legation, London.

Paul.—Mains.—A well, tank, gravitation and distributing mains, etc., at Mousehole Water Trevithal Supply, for U.D.C. Lewis & Lewis, engineers, 15, Victoria-st., S.W.1.

OCTOBER 3.

Hendon.—Culverts.—Surface water culverts at Uxbridge-rd., Woodridings, Pinner, comprising 453 yds. lin. of 54-in. concrete tubes, 126 yds. lin. 30-in. manholes, concrete tubes, etc., for R.D.C. H. W. Rackham, E. & S. Dep. £3 3s.

OCTOBER 11.

Brighton. — Constructional Steelwork. — Erection of, in connection with alterations to the Electric Light Station in North-rd., Brighton, for the Brighton B.C. Wm. H. Overton, F.R.I.B.A., 38 and 39, West-st., Brighton. Dep. £5 5s.

OCTOBER 25.

Johannesburg.—Steelwork.—For South African Railways and Harbours Committee. Department of Overseas Trade, 35, Old Queen-st., S.W.1. (Ref. A.X. 6752.)

NOVEMBER 12.

Australia.—Steelwork.—Steel chimneys and dust eliminators, for Yallourn Power Station, for State Electricity Commission of Victoria. W. J. Price, acting secretary, 22-32, William-st., Melbourne, Australia.

ROAD, SEWERAGE, AND WATER WORKS.

SEPTEMBER 17.

Billericay.—Drainage.—Provision, laying and jointing of about 573 lin. yds. of 12-in. glazed stoneware pipe sewer, construction of manholes and other incidental works, in South Weald, near Brentwood, for R.D.C. Willcox & Raikes, engineers, 33, Gt. Charles-st., Birmingham. Dep. £2 2s.

Caterham.—Improvements.—In Buxton-lane, for U.D.C. H. R. Martin, District Surveyor. Dep. £2 2s.

Conway.—Mains.—Laying of approximately 1,000 yds. of 12 in. steel gas mains for connecting new gasworks, now in course of erection on Morfa, Conway, with existing gasworks, situate in Bangor-rd., Conway, for T.C. W. Newbigging, consulting engineer, 5, Norfolk-st., Manchester.

Farnham.—Making-up.—Surface water sewerage, kerbing and making-up of Weydon Hill-rd., Farnham, about 220 yds. in length, for U.D.C. L. H. Starling, E. & S.

Plymouth.—Making-up.—West Down-rd. and Beaumont-st.-lane North, for C.B. J. Wibberley, Borough Engineer, Surveyor and Architect. Dep. £2 2s.

Poole.—Sewerage.—4½ miles of 8 in., 9 in. and 12 in. cast-iron and stoneware pipe sewers, together with manholes, etc., in districts of Stanley Green, Dorchester-rd. and Newtown, for T.C. E. J. Goodacre, B.E. Dep. £5 5s.

Southend-on-Sea.—Making-up.—Of Duke of Manchester-drive extension, Middlesex-av., Pavilion-drive extension and Darlinghurst-grove extension, and incidental works in connection thereto, for Corporation. R. H. Dyer, B.E. & S. Dep. £2.

South Shields.—Making-up.—Of St. George's-av. (part), for C.B. J. Paton Watson, B.E.

SEPTEMBER 18.

Carmarthen.—Sewerage.—Laying about 1,425 lin. yds. 9 in. dia. pipe sewers, with manholes, flushing manholes, ventilating shafts, etc., in Tanerdy District, for T.C. G. L. Ovens, B.E. & S. Dep. £1.

Cheshunt.—Sewer.—654 yds. of 9 in. diameter stoneware pipe sewer, together with necessary manholes, lampholes and other works, in Cromwell-av., Dark-lane and Barrow-lane, for U.D.C. J. E. Sharp, E. & S. Dep. £2 2s.

Ayr.—Drainage.—Construction of sewage disposal works for Craigbank special drainage district, for Ayr D.C. of C.C. W. R. Copeland & Sons, C.E., 146, West Regent-st., Glasgow. Dep. £1 1s.

Hailsham.—Extensions.—To sewer in Albert and Victoria-rds, Polegate, for R.D.C. W. O. Humphery, engineer.

Southport.—Paving.—Levelling, paving, metalling and making good Bibby-rd. and Chester-av., for C.B. A. E. Jackson, B.E. Dep. £2 2s. each.

Sutton and Cheam.—Making-up.—Of The Downsway, 500 lin. yds., 50 ft. wide (in asphalte); Devonshire-rd., 180 lin. yds., 40 ft. wide (in asphalte); Ridge-rd., 550 lin. yds., 50 ft. wide (in concrete), for U.D.C. Wm. Hedley Grieves, S. Dep. £3 3s.

Tottenham.—Levelling, etc.—Clearing, ploughing, levelling, and sowing with grass seed about 36 acres of land at Lordship Recreation Ground, for U.D.C. Engineer to the Council, Town Hall, Tottenham, N.15. Dep. £1.

SEPTEMBER 19.

Burntisland.—Pipes.—Excavating tracks and providing, laying and jointing 740 lin. yds. 7 in., 6 in., 4 in., and 3 in. cast-iron water pipes in streets in Burgh, for T.C. J. A. Waddell, B.S.

Church.—Widening.—Of Dill Hall-lane, near to Dill Hall Farm, for U.D.C. S.

London.—Paving.—Paving and forming roadway and footways of: (*a*) Shell-rd., Lewisham (part), area about 2,500 yds.; and (*b*) Pearfield-rd., Forest Hill, area about 2,800 yds., for Lewisham B.C. B.S.

SEPTEMBER 20.

Holywood.—Sewer.—For (1) sub-division of clear water basin at Waterworks, and (2) relaying sewer in Church-view and extension of sewer culvert at Conaty's Arch, for U.D.C. M'Carthy & Lilburn, Scottish Provident-bldgs., Belfast.

SEPTEMBER 22.

Haverfordwest.—Improvement.—Laying of about 2,500 superficial yds. of mastic asphalt carpet upon existing concrete foundation, at Cartlett, for Corporation. F. Alan Long, B.S. Dep. £2 2s.

Henley-on-Thames.—Reconstruction.—Of certain sewers within borough, together with laying of about 4,000 yds. of air and delivery mains, 8 in. diameter, for T.C. F. C. Uren, B.S.

Magor.—Improvements.—Road diversion near Bishton, 900 yds. in length and 20 ft. in width, for R.D.C. Thomas & Morgan & Partners, civil engineers, Pontypridd. Dep. £5 5s.

Magor.—Mains.—Provision and laying of about 3,700 yds. of 3 in. dia. cast-iron water mains, with various fittings, betwen Llanwern and Bishton, for R.D.C. Thomas & Morgan & Partners, civil engineers, Pontypridd. Dep. £5 5s.

Rochford.—Making-up.—In reinforced concrete of Woodfield-rd. (part of), Church-rd. (part of), and Meadow-rd., Hadleigh, for R.D.C. A. C. Madge, S. Dep. £1 each.

St. Andrews.—Drains.—15 in., 12 in., and 10 in. fireclay drains and relative works at St. Andrews Links, for T.C. William Watson, B.E. Dep £1 1s.

SEPTEMBER 24.

Beckenham.—Making-up.—Of Kent House-rd. and St. Margaret's-rd., for U.D.C. H. Storr Best, S. Dep. £2.

Folkestone.—Sewer Extension.—Approximately 578 ft. run of 3-ft. cast-iron piping on timber piles, together with other incidental work, for sea outfall sewer extension, for T.C. B.E., Municipal Offices, Folkestone. Dep. £4 4s.

Ilford.—Paving.—Section of footpath in Breamore-rd., for T.C. B.E. & S. Dep. £1 1s.

Slough.—Sewer.—Construction of 1,275 yds. approx. of 16 in. diam. cast-iron pipe sewer, 9 in. and 6 in. stoneware branches and appurtenant works, for U.D.C. F. W. H. Smith, Acting Surveyor, William-st.

Southampton.—Roads.—Certain roads and sewers on housing site on north side of Burgess-rd., for C.B. B.E. Dep. £1 1s.

SEPTEMBER 26.

Merton and Morden.—Culverts.—For (a) Construction of culverts under West Barnes-lane and Southern Railway (Leatherhead Branch), and (b) construction of 9 in. soil sewers along Kingston by-pass rd. near Burlington-rd.; approximate length, 420 yds., for U.D.C. G. Jerram, E & S. Dep. £1 1s. each.

SEPTEMBER 28.

Wallingford. — Resurfacing. — With slag tarmacadam, parts of St. Leonard's-sq., St. Martin's-st., and Market Place, and parts of St. Martin's-st. and High-st., for T.C. B.S., 23, St. Mary's-st. Dep. £1 1s.

SEPTEMBER 29.

Pewsey.—Broken Stones, etc.—For R.D.C. W. F. Bickford, S.

OCTOBER 1.

London.—Paving.—Wood block paving on reinforced concrete foundations, etc., in Commercial-rd., Peckham, S.E.15, for Camberwell B.C. W. Bell, B.E. and S.

Auction Sales Tenders, etc.

SEPTEMBER 19.

London.—Henry Butcher, Hall & Co. will sell by Order of Messrs. Foster & Dicksee, Ltd., surplus plant, stone-working and contractors' plant, Auctioneers, 63 and 64, Chancery-lane, W.C.2.

OCTOBER 2nd and 3rd.

London.—Joseph Hibbard & Sons will sell first portion, without reserve, on premises of Electric Saw Mills, Victoria Park, E.9, at 1 o'clock each day, stock of hardwoods. Auctioneers; 15, Newington Green, Islington, N.16.

OCTOBER 16.

Pinner.—Hampton & Sons will sell (unless previously sold) freehold property, "The Hall" Estate, Pinner. Auctioneers, 20, St. James'-square, S.W.1.

AT EARLY DATE.

London.—Grant, Stevenson & Co. will sell residence at Wimbledon, in country surroundings. Stable, garage, buildings, etc. Auctioneers, Airspado House, Holland Park-av., W.11.

Public Appointments

SEPTEMBER 22.

Bradford.—Architectural Assistant required by the City Architect. City Architect's Department, Town Hall.

CONTRACTS PLACED

Colnbrook.—REBUILDING.—The contract for the rebuilding of the "Plough" public-house on the Bath-road has been placed with Messrs. W. A. James and Son, Station Works, Maidenhead. The architects are Messrs. Edgington and Spink, 152, High-street, Windsor, acting on instructions from Messrs. H. and G. Simmonds, Ltd., brewers, Reading.

Plymouth.—OFFICES.—Mr. P. Avent proposes to build new showrooms and offices in Ebrington-street to the plans of Mr. L. F. Nanstone, L.R.I.B.A., 118-119, Tavistock-road. The builder is Mr. J. W. Spencer, St. Lawrence-yard.

TRADE NEWS

Heating and Cooking Demonstrations.

The motor travelling caravan of the National Radiator Co., with a working "Ideal Cookanheat" installation, will give demonstrations as follows:—September 17, Pierremont Garage Yard, High-street, Broadstairs; September 18, Star Garage, Kingstreet, Ramsgate; September 19, Sea Front (near Pier), Deal; September 20, corner of Castle Hill-avenue and Shorncliffe-road, Folkestone; September 21, corner Chapel-street and Red Lion-square, Hythe.

Post Office Stores Factory, Birmingham.

In our description of this work, illustrated last week, it was stated that Messrs. Vulcanite, Ltd., supplied "Vulcanite felt." This, we are informed, is somewhat misleading, as Vulcanite felt by itself is a material which can only be employed either as a sarking or underlining to slates, or for covering temporary buildings, or buildings of light structure. Actually, the whole of the flat roofs on this building were covered by the firm with their 3-ply Vulcanite roofing, which is a roof covering of a durable and permanent nature.

We have also received from the Vulcanite Company a copy of their latest catalogue of Vulcanite roofing for covering flat roofs of wood and concrete construction, also for lining basements, tanks, reservoirs, etc. The catalogue contains much valuable technical data, as well as sectional drawings showing the application of the roofing, and a number of excellent photographic illustrations of buildings on which the material has been used.

We have also received particulars of the firm's "Grip-Flash" compound wedge, which is made of malleable iron in three pieces held together with an expanding metal clip. When inserted into the brickwork course and on top of the "turn in" of the flashing by the simple mechanical action of driving home the protruding tongue or wedge, it provides a safe and certain fixing of the flashing in the wall, making it impossible for the flashing to draw out. The corrugated faces to the upper and lower plates, by embedding themselves into the brick above and the flashing beneath, secure perfect grip. The device is claimed to be economical in cost and will not shrink or fall out. The wedges are made in five sizes to meet the variations in brick-bed joints.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians, B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education, M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board; Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Clerk, C.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; County Architect, C.A.; Surveyor, S.; Engineer, E.; Borough Architect, B.A.; Architect, A.

Accrington.—T.C. accepted tender for additional 49 houses on Willows-lane estate.

Aekworth.—Barnsley Brewery Co. are to carry out alterations to Boot and Shoe Inn.

Alvaston.—Sanction been given by U.D.C. to erection of 8 houses by T. Holt & Son in Lindern-drive.

Ashby.—Sir Joseph Hood, Bart. having offered to give £2,000 towards erection of open-air swimming baths, at Ashby-de-la-Zouch, provided that Ashby itself assists scheme, a substantial list has been opened.

Askern.—Askern Coal and Iron Co. applied for subsidy in respect of 42 houses.

Birmingham.—Branch stores is to be built in High-st., King's Heath, for Ten Acres and Stirchley Co-operative Society, Ltd. Plans by H. W. Sinister, Norwich Union-chambers, Congreve-st.

Blackpool.—C.B. are to erect 9 bus shelters in various parts of the town.—Borough Electrical Engineer is to invite tenders for erection at Rigby-rd. depot of steel framed building for use by electricity mains department and for storage of cooking and heating apparatus.—Tramway Manager submitted scheme for construction on land adjoining tram depot in Blundell-st. and the Gas Works in Princess st. of joint administrative offices for gas, tramway and electricity departments, and also for provision of any necessary showrooms.—General Purposes Committee been recommended to give immediate consideration to question of proposed new town hall site.—Plans passed: 12 houses and garages, Woodstock-gardens, Senior & Son 3 houses and garages, St. Annes-rd., J. Midgley; 7 houses, Mayfield-av., J. W. Clarkson; 3 houses, Lyndhurst-av., C. Harding & Son; 8 houses, Thirsk-grove, H. Suthers; 10 houses and garages, Parkway, Wilson & Thornton; 3 houses, Broughton-av., E. Mason; 10 houses and 11 garages, Osborne-av., Cleveleys, Fletcher, Ltd.; 3 houses and 1 garage, Blackpool-rd., Dawson & Fielding; 4 houses, Washington-av., T. Barton; Six outbuildings, Roseacre, A. Fletcher.

Bolton.—U.D.C. is to apply for M.H. sanction to 27 houses in Chapel-st. and Furlong-rd., at £10,970.

Bootle.—Mersey Docks and Harbour Board Pier Head, approved scheme for accommodation and equipment at Carriers Dock. Scheme is to cost £23,324.

Bridlington.—T.C. passed plans deposited by B. Stamford, for alteration to servants' quarters, Bridlington School, for Governors of Bridlington School.

Burnham.—U.D.C. approved plans for four more houses on Hillside by E. & G. Read.—Surveyor reported tenders being invited for erection of 18 houses.

Burnley.—T.C. decided that 64 more houses be built on Stoops estate.—Christian Scientists secured central plot of land with view to erecting new church to accommodate 500 people. Plans by S. Taylor, F.R.I.B.A., architect, 74, Manchester-rd.

Coalville.—Trustees of London-rd. Baptist Church proposes to erect new edifice.

Colne.—T.C. passed plans for new conveniences at Swan Hotel, for Massey's Brewery, Ltd.,; and lay-out plan of portion of Cook House estate, for W. Cox & Son.

Consett.—Elementary school for 120 children is to be provided on Grove estate by Catholic Authorities. Plans by F. A. Doyle, 29, Newmarket-st.

Darlington.—Central premises for the Darlington Co-operative Society, Ltd., at Priestgate, to cost £40,000. Plans by F. Clarke, architect, 10, Houndgate.

Devon.—Road reconstruction schemes totalling over £76,000 been considered by Devon Main Roads Committee. Schemes are: Instow road improvement, £1,561; Barnstaple-Ilfracombe road widening (near Foxhunter), £29,518; Braunton deviation, £25,368; Bampton road widening, £14,076; and Bideford-Torrington road widening, £5,831.

Dewsbury.—C.B. passed plans:—Yorkshire (W.D.) Electric Tramways, Ltd., sand shed and workshop, Savile-rd.; J. Walker & Sons, 3 lock-up shops, Crackenedge-lane; Yorkshire Electric Transformer Co., Ltd., extension of workshop, Brewery-lane; S. Lyles, Sons & Co., Ltd., storage shed, Hoyle Head Mill, Earlsheaton; W. P. Armitage, 7 houses, Wilans-rd.; R. Laycock, 8 houses, Rywell-rd.—B.S. submitted plan of land adjoining Pilgrim Farm housing scheme for proposed shopping site. Resolved that lay-out plan be prepared.

Dewsbury.—B.G. proposing to erect new Council wards at Institution. Architects, W. Hanstock & Son, Branch-rd., Batley, Yorks.

Doncaster.—L. & N.E. Railway Co. decided to place contract for widening of Nine Arch Bridge, a tender amounting to £4,564 been submitted by Railway Co. to T.C. for approval.

Dovercourt.—Funds being raised for Church Hall at Upper Dovercourt, estimated to cost £700.

Dover.—Plans passed by T.C. for A. H. Steele to alter Metropole Garage for Plaza Picture Palace Co., for conversion into a picture palace; 6 houses at Elms Vale-rd., W. E. Randall, High-st., Chatham.

Dublin.—Plans for buildings and works of reconstruction been approved by H. T. O'Rourke, City Architect.—Malahide-rd., six houses, Dublin Commercial Public Utility Society.

Dudley.—Watch Committee of T.C. have under consideration alterations in police buildings. B.E. prepared plans showing proposed alterations approved by the Home Office. Estimated cost of work is £2,000.

Eastbourne.—T.C. passed plans:—W. Llewellyn & Sons, Ltd. (architect, D. Wood), Brampton-rd., Hampden Park, 2 pairs semi-detached houses; H. J. Lavender, Coombe-rd., 4 pairs semi-detached houses; J. Thurlow & Sons (architect, A. Ford), Seaside, St. Anthony's-av., 3 pairs semi-detached houses; H. Harvey (architects, P. D. Stonham & Son), Cavendish-place, Pier Hotel, alterations and additions; Star Brewery Co., Ltd. (architect, A. Ford), Star-rd., "Star Brewery," additions; Rev. E. L. Browne (architect, F. G. Cooke; builders, M. Martin & Sons), Meads-rd., "St. Andrew's," extension to schoolroom; Weller & Seymour (architect, C. Ford), Brampton-rd., Hampden Park, pair semi-detached houses; J. T. Wenham (architect, S. G. Scales), Rotunda-rd., pair of semi-detached houses; St. Anthony's-av., 2 pairs semi-detached houses; and Rotunda-rd., 16 houses.

Enniskillen.—Sum of £3,000 is to be spent on erection of new laboratory at Portora Royal School.

Filey.—Council instructed surveyor to prepare plans for laying out of rest of land on Scarborough-rd. for building of more houses.

Frimley.—Extensions are to carried out at Cottage Hospital at £17,000.

Hadleigh.—U.D.C. approved report of Housing Sub-Committee for building of 16 non-parlour type houses on Aldham-rd., and employment of Mr. Fincham as architect.

Halstead.—U.D.C. passed plans:—Pair of cottages, Balls-chase, for W. Pudney & Son; two pairs of cottages, Colchester-rd., for S. A. Courtauld.

Hazel Grove and Bramhall.—Plans passed:—3 houses, Broadoak-rd., Bramhall, for G. Fryer; 2 houses, Grange-rd., Bramhall, for F. Hallows & Co.; 2 houses, Grove-st., Hazel Grove, for J. Cookson; 8 houses, Talbot-st., off Commercial-rd., Hazel Grove, for Oldham & Hallworth.

Heston.—New elementary school for 450 pupils is to be built on Heston recreation ground.

Hoddesdon.—Wesleyan London and Home Mission and Extension Fund approved preliminary plans for church, to accommodate 500 people. Architects, Smee & Houchin, Fleet House, Fleet-st., E.C.2.

Langport.—R.D.C. approved plans for Inn at Westport, for H. M. Lang & Co.

Leeds.—Tenders being invited for Socialist Club and Institute at Bewick-st. C. A. Castelow, architect.

Leeds.—In connection with the alterations at the laundry at Gateforth Sanatorium into a dining room, and conversion of existing dining room into an additional recreation room, T.C. resolved that, subject to approval of M.H., work be carried out under directions of City Engineer, at £534.—M.H. sanctioned borrowing of £17,700 for erection of 50 type A3 houses on Henconner-lane housing estate.—Plans passed:—Alterations to stage and removal of seats at Scala Cinema, Albion-place; A. Gibbs & Son, 6 semi-detached houses, Park Spring-gardens, Bramley; D'Arcy Bruce Wilson, 4 semi-detached houses, The Oval, Killingbeck; Lieut.-Col. W. A. Stott, 4 semi-detached houses, Stainburn-crescent, Moortown; G. W. Petty, 2 semi-detached houses, Vesper-walk, Kirkstall; H. V. Waite, 6 semi-detached houses, Nixon-av. and Richardson-rd., Osmondthorpe; R. Battersby & Sons, 12 semi-detached houses, Roundhay-grove, Harehills; T. Thompson, 4 semi-detached houses, Ring-rd., Farnley; Bailey Brothers, 6 semi-detached houses, Upland-crescent, Harehills; W. E. Batty & Co., 10 semi-detached houses, Wensley-green, Chapel Allerton; A. Dickinson, 6 semi-detached houses, Devonshire-av., Roundhay; Mrs. Charlotte Wheatley, 4 semi-detached houses, Newport-crescent, Headingley; Sylvanus Shute, 4 semi-detached houses, Stainburn-crescent, Moortown; W. Jowitt, 16 houses, Rookwood-av. and Selby-rd.; A. Braithwaite & Co., Ltd., 30 flats, Wood-lane, Headingley.

Lincoln.—Funds being raised for restoration of St. Hugh's, Lincoln. It is estimated that cost of renovation will be £1,000.

Liverpool.—Corporation propose to erect library in Lodge-lane, at £11,500. Plans being prepared for tramway shelter outside Smithdown-rd. cemetery.

Luton.—T.C. passed plans:—A. Mardle, 5 shops, Dunstable-rd.; Warren & Fountain, 6 houses, Sunridge-rd.; Mrs. E. Hill, stores, Oxen-rd.; W. Hucklesby, 2 houses and shops, corner Denbigh and Holland-rds.; Beds. C.C., modern school for girls, Alexandra-av.; G. W. Mardle, 7 houses, Turners-rd.; F. Clarke, 2 houses, Wardown-cres.; Dominion Gramophone Record Co., Ltd., boiler house and pump room, Chaul End Works; J. T. Garrett, 8 houses, Park-rd.

Maidstone.—T.C. passed plans:—Gabriel's Hill, additions to warehouse for Corfe & Son, Ltd.; Grove-rd., Free Church Hall for Maidstone and District Free Church Council; St. Peter's-st., extension of generating house for the Maidstone Gas Co.

Margate.—E.C. approved plans for elementary school at Garlinge, at £13,884. Plans by Foster & Barber, architects, 183, Northdown-rd.

Mexborough.—C. F. Moxon, architect, Regent-st., South Barnsley, is preparing plans for conversion of premises into bakery, for Yorkshire Co-operative Bakeries, Ltd.

Newcastle-on-Tyne.—Alterations and improvements are to be carried out to Manor Vaults, to plans by Marshall & Tweedy, FF.R.I.B.A., 54, Grey-st.—Style & Mantle, Ltd., Yeatherstone-st., E.C.1, are to have new premises in Clayton-st. Architect, M. K. Glass, 20, Saville-row.—Premises are to be erected for F. W. Woolworth, Ltd., in Clayton-st.

Nuneaton.—E.C. given instructions for preparation of plans for senior school, to accommodate 600 scholars. Plans by H. J. Ash, A.R.I.B.A., architect, Bridge-st.

Oakham.—U.D.C. decided to erect 16 more houses on Cold Overton-rd. site.

Oswestry.—Governors of the Boys' High School proposing to make extensions. Scheme is being prepared by architect to Salop E.C., G. H. Bailey, 5, Belmont, Shrewsbury.

Paisley.—Dean of Guild Court passed plans: James Y. Keanie (Ltd.), Johnstone, semi-detached cottage at Hawkhead-rd., and 2 semi-detached bungalows at Alton rd., and Seedhill Finishing Co. (Ltd.), additions to works in Ralston-st.

Peterborough.—Rev. Louis Allen, of All Souls', Park-rd., has a scheme on hand for enlargement of schools. Sanction of B.E. been obtained.

Romford.—Police station is to have a recreation hall costing £2,000.

St. Albans.—Details of scheme which B.G. agreed upon for alterations and enlargements to Poor Law Institution and Infirmary, at £25,760, been submitted to M.H.

Sheffield.—Formal sanction been given to T.C. by M.H. to borrowing of £35,521 for erection of houses on Longley estate, and £34,627 for more houses on Ridgeway-rd. estate.—Council is to ask M.H. to approve erection of 100 houses on Longley estate (scheme No. 13).—External painting of 492 houses on Manor estate and 200 on Wincobank estate is to be carried out by direct labour of Corporation, at £1,368.—T.C. received formal sanction of M.H. to loan for £24,263 for erection of new retail market at Castle Hill.

Silksworth.—Plans being submitted to Sunderland Corporation Building Committee for laying out a new housing estate at Silksworth-lane, where it is proposed to built about 40 semi-detached houses.

Skegness.—Further interesting development on Skegness front is foreshadowed in a letter received by Council from Skegness Pier Co. Scheme for building a large concert hall and refreshment buffet at entrance to pier is under consideration.

Spalding.—U.D.C. are to seek permission from M.H. to erect 20 houses.

Stamford.—Governors of Stamford Infirmary decided to erect new wing to institution, at £14,000. Architects, Traylen & Lenton, FF.R.I.B.A., Broad-st.

Stockport.—Alterations to Grapes Hotel, Underbank, for Wilsons Brewery, Ltd., Monsall-rd., Manchester. Plans by W. Johnson & Sons, 27, Oldham-rd., Manchester.

Strabane.—U.D.C. received from Ministry of Home Affairs sanction for £4,000 for housing scheme.

Stretford.—Surveyor is to prepare a plan of a suitable building adjacent to Council's property at Trafford Bar, for showroom.

Thorne.—Plans being prepared for 400 more houses by Colliery Co.—Catholic authorities propose to provide a new day school.

Todmorden.—B.G. decided to build new casual ward at Stansfield-view at £6,000, and application been made to M.H. for sanction to borrow necessary money.

Urmston.—Taylor & Whittaker, Ltd., Davyhulme-rd., Davyhulme, Urmston, near Manchester, acquired site in Cornhill-rd. for houses.

Wakefield.—F. Simpson, architect, Southgate, is preparing plans for warehouse in Russell-st. for R. S. Dyson & Co., Ltd.

Wealdstone.—U.D.C. approved plans for garage and petrol storage tank in Masons-av. for Watford Co-operative Society; 4 houses in Torver-rd. for Lambert & Cooke; 15 garages in rear of Station-rd. for A. G. Bristow; extension of works in Bruce-rd. for Winsor & Newton; 4 houses in Woodway-cres. for E. Elliott; and dressing-rooms, etc., at Lower Mead, Station-rd., for Wealdstone Football Club.

West Bromwich.—Large school reorganisation schemes are proposed by E.C.

Wilstead.—Sum of £288 been raised to preserve ancient parish church.

Wolverhampton.—Staffordshire, Wolverhampton and Dudley Joint Committee for Tuberculosis resolved to increase accommodation at Groundslow Sanatorium by further 20 beds, at £9,430. Scheme by County Architect, W. James Nevell, County-buildings, Stafford.

FIRES.

London (Lambeth).—Fire in timber yard belonging to Hibberd Bros., in Vauxhall-walk.

Driffield.—Isolation hospital for infectious diseases been burnt out. Damage is estimated at £15,000.

* See also our List of Contracts, Competitions, etc.

PRICES CURRENT OF MATERIALS.*

Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 19 6

Per 1,000 Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at King's Cross	2 12 3	Best Blue Pressed Staffs	9 5 0
Do., grooved for Plaster	2 14 3	Do. Bullnose	9 15 0
Do., Bullnose	3 7 3	Blue Wire Cuts	7 5 0

Best Stourbridge Fire Brick :—
2½ in. ..... 8 11 0 3 in. 10 3 0

GLAZED BRICKS—

Best White Ivory, and Salt Glazed Stretchers	1 0 0	D'ble Str'tch'rs	29 10 0
		D'ble Headers	26 10 0
		One Side and two Ends	30 10 0
Headers	20 10 0	Two Sides and one End	31 10 0
Quoins, Bullnose and 4½ in.		Splays, and Squints	28 0 0
Flats	27 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Slate, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London

	s. d.		s. d.
2 in. per yd. super.	1 11	3 in per yd. super	2 9
2½ in. ,, ,,	2 4	4 in. ,, ,,	3 6

	s. d.	
Thames Ballast	10 6	per yd.
Pit Sand	13 9	,, ,,
Thames Sand	14 6	,, ,,
Best Washed Sand	14 6	,, ,,
½in. Shingle for Ferro-Concrete	12 9	,, ,,
¾in.	14 0	,, ,,
1½in. Broken Brick	11 6	,, ,,
Pea Breeze	8 0	,, ,,

delivered 2 miles radius Paddington.

Per ton delivered in London area in full van loads.

Best Portland Cement. British. Standard Specification. Test £2 13 0 to £2 15 0

Ex ship, alongside at Vauxhall in 80-ton lots.

	£ s. d.
Ferrocrete per ton extra on above	0 7 6
Super Cement (Waterproof)	4 3 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
,, ,, Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
,, ,, White	3 12 6
,, Fine	5 12 0
Sirapite, Coarse	3 9 0
,, Finish	3 17 0
Grey Stone Lime	2 10 9
Chalk Lime	2 10 9
Best Ground Blue Lias Lime	1 17 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 37s. 0d. per ton at rly. dp.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10

BERE STONE—RANDOM BLOCK—
Free on rail at Seaton Station per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. per ft. cube 3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.

PORTLAND STONE.—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4½
Do. do. delivered on road wagons at above stations, per ft. cube 4 5½
White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

HOPTON-WOOD STONE.—
Delivered at any Goods Station, London. s. d.
Random blocks from 10 ft. and over P. ft. cb. 14 0
Sawn two sides ,, 22 6
Sawn three or four sides ,, 27 6

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London.
6 in., sawn two sides landings to sizes (under 30 ft. super) ..... Per ft. super 5 6
6 in. rubbed two sides, ditto ..... ,, 6 0
3 in. sawn two sides slabs (random sizes) ,, 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... ,, 1 6½
1½ in. to 2 in. ditto, ditto ..... ,, 1 3½

HARD YORK—
Delivered at any Goods Station, London.
Scappled random blocks ..... Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) ..... Per ft. super 5 1½
6 in. rubbed two sides, ditto ..... ,, 6 1½
4 in. sawn two sides slabs (random sizes) ,, 2 1½
3 in. ditto ditto ,, 2 10
2 in. self-faced random flags ..... Per yd. super 8 8

CAST STONE.

Delivered in London area in full van loads, per ft. cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£30 0	3 × 6	£21 0
4 × 9	26 0	3 × 11	25 0
4 × 8	25 0	2 × 11	26 0
4 × 7	23 0	3 × 9	24 0
3 × 8	22 0	2½ × 9	24 0
3 × 7	22 0	3 × 4½	21 0
2½ × 7	21 0	3 × 4	21 0

PLANED BOARDS.

1 × 11	£30 0	1 × 9	£28 0

PLAIN EDGE FLOORING

Inches.	per sq.	Inches.	per sq.
¾	18/-	1¼	30/-
¼	21/-	1½	34/-
1	24/-		

TONGUED AND GROOVED FLOORING

Inches.	per sq.	Inches.	per sq.
1	24/-	⅝	16/6
1¼	30/-	¾	19/-
1½	34/-	1	24/-

Ins. BATTENS.	s. d.	SAWN LATHS.	s. d.
¾×2 ..... per 100 ft.	2 6	Per bundle	2 6

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscot, per ft. cube	0 16 0	to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 14 0	to 0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 10 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 15 0	to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 16 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 1 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 10 0	to 0 14 0
Best Scotch Glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000.

	£ s. d.		£ s. d.
24 by 12	32 18 4	18 by 10	18 12 11
22 by 12	29 17 11	18 by 9	16 9 2
22 by 11	27 14 2	16 by 10	15 12 6
20 by 12	26 5 0	16 by 8	12 3 9
20 by 10	22 10 0		

TILES.

Delivered at London rate stations in full truckloads of not less than 6 tons. Per 1,000. f.o.r. London.

	£ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 7 6
ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) { Hand-made	0 9 6
{ Machine-made	0 9 0

METALS.

JOISTS; GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
,, Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.—To London Station, per ton

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅝ in. to 1 in.	10 15 0
⅜ in.	11 0 0	1⅛ in. to 2⅞ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Tubes. Wrought Mild Steel.	Tubes. Genuine Staffs. Iron.	Fittings. ½ in. and under.	Fittings. Over ½ in.	Flanges. ½ in. and under.	Flanges. Over ½ in.
	%	%	%	%	%	%
Gas	67½	50	42½	45	52½	55
Water	63¾	46½	37½	40	47½	50
Steam	60	42½	32½	35	42½	45
Galv. gas	55	37½	32½	35	42½	45
Galv. water	50	32½	27½	30	37½	40
Galv. steam	45	27½	22½	25	32½	35

C.I.—HALF-ROUND GUTTERS— London Prices ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/3½	11½d.	3½d.
3½ in.	1/4½	1/1½	3½d.
4 in.	1/6	1/3	3½d.
4½ in.	1/7½	1/4½	4½d.
5 in.	1/10½	1/6½	5½d.

O.G. GUTTERS.

3 in.	1/8	1/4½	3½d.
3½ in.	1/8	1/4½	3½d.
4 in.	1/9½	1/4½	3½d.
4½ in.	1/11½	1/7½	4½d.
5 in.	2/4½	1/10½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock Branches, angles.	stock angles.
2 in. plain	1/10½	1/3	1/9½
2½ in. ,,	2/0½	1/4½	2/1½
3 in. ,,	2/6	1/9	2/7½
3½ in. ,,	2/11½	2/0½	3/0½
4 in. ,,	3/5	2/6½	3/8½

L.C.C. COATED SOIL PIPES—London Prices ex Works.

	Pipe.	Bends, stock Branches, Pipe, angles.	stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	3 3	2 4½	2 10
2½ in. ,,	3 9	2 7½	3 7
3 in. ,,	4 6	2 10	4 2½
3½ in. ,,	4 11½	3 7	4 11½
4 in.	5 5½	4 0½	5 9

L.C.C. COATED DRAIN PIPES—London Prices ex Works

	Pipe, angles, stock angles.	Bends, stock Branches.	
	s. d.	s. d.	s. d.
3 in. per yd. in 9ft. lengths	4 4	5 1	8 0½
4 in. ,, ,,	4 10	5 8	10 0
5 in. ,, ,,	6 6	10 10	17 1
6 in. ,, ,,	6 8	13 2	21 9

Gasken for jointing, 38/6 per cwt.

	Per ton in London. £ s. d.		£ s. d.
IRON—			
Common bars	13 0 0	to	14 10 0
Staffordshire Crown Bars—Good merchant quality	14 5 0	to	15 15 0
Staffordshire Marked Bars	16 5 0	...	17 5 0
Mild Steel Bars	10 0 0	...	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0	...	11 9 0
Hoop iron, basis price	12 0 0	...	13 0 0
,, Galvanised	27 0 0	...	28 0 0
Soft Steel Sheets, Black—			
Ordinary sizes, to 20 g.	13 5 0	...	14 5 0
,, ,, ,, 24 g.	14 5 0	...	15 5 0
,, ,, ,, 26 g.	16 5 0	...	17 5 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 10 0	...	16 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 10 0	...	17 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	18 10 0	...	20 10 0
No. 1 quality £4 per ton extra.			
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18 0 0	...	19 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	18 10 0	...	19 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	21 10 0	...	22 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22 0 0	...	23 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 0 0	...	26 0 0
Best Soft Steel Sheets, 26 g.	25 10 0	...	26 10 0
Cut Nails, 3 in. to 6 in.	18 0 0		

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

	£ s. d.
LEAD—Sheet, English, 4 lb. and up	30 0 0
Pipe in coils	30 10 0
Soil pipe	33 10 0
Compo pipe	34 10 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 5s. cwt. extra.

Oil lead, ex London area, at Mills ..... per ton 20 5 0

COPPER.

	s. d.
Seamless Copper tubes (basis) ..... per lb.	1 1
Strong sheet ..... ,,	1 0
Thin ..... ,,	1 1
Copper nails ..... ,,	2 3
Copper wire ..... ,,	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
41/6 62/- 92/- 174/- 300/- 588/- per doz.

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. ¾ in. 1 in.
39/6 60/- 116/6 per doz.

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1¼ in. 2 in. 3 in. 3½ in. 4 in.
10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in. ¾ in. 1 in. 1¼ in. 1½ in.
35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1¼ in. 1½ in. 2 in. 3 in.
8 lbs. P. traps ... 33/- 41/- 56/- 101/- per doz.
8 lbs. S. traps ... 35/- 45/- 66/- 126/- ,,

TIN.—English Ingots, 2/6 per lb. SOLDER.—Plumber's 1/1, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

			s. d.
Raw Linseed Oil,	in pipes	per gallon	0 2 8
,, ,, ,,	in barrels ...	,,	0 2 10
,, ,, ,,	in drums ...	,,	0 3 0
Boiled ,, ,,	in barrels ...	,,	0 3 0
,, ,, ,,	in drums ...	,,	0 3 3
Turpentine	in barrels	,,	0 3 10
,,	in drums (10 gall.)	,,	0 4 0
Genuine Ground English White Lead, per ton			52 0 0

(In not less than 5-cwt. casks.)

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

PAINTS, &c. (*contd.*)

GENUINE WHITE LEAD PAINT.

		£	s.	d.
"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J," Brand, and other best brands (in 14 lb. tins) not less than 5 cwt. lots	per ton delivered	70	10	0
Red Lead, Dry (packages extra) ...	per ton	39	10	0
Best Linseed Oil Putty	per cwt.	0	15	0
Filicol	,,	0	15	6
Size. XD quality	fkn.	0	3	6

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per ft.		Per ft.
15 oz. fourths ...	2½d.	32 oz. fourths	6½d.
15 ,, thirds ...	3½d.	32 ,, thirds	8½d.
21 ,, fourths ...	3½d.	Obscured Sheet, 15 oz.	3½d.
21 ,, thirds ...	4d.	,, ,, 21 ,,	4½d.
26 ,, fourths ...	3½d.	Fluted 15oz.6½d.,21oz.	9d.
26 ,, thirds ...	6½d.	En'lled 15 oz. 4½d., 21 oz.	6d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
½ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic Stippolyte, and small and large Flemish White	5½d.
Ditto, tinted	8½d.
Rolled Sheet	4½d.
White Rolled Cathedral	4½d.
Tinted do.	6½d.

Cast plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon £	s.	d.
Oak Varnish	Outside	0	14	0
Fine ditto	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	0

Builders' Estates.

Mr. Alfred James Bray, Bristol, builder, left £7,114 (net personalty £6,418).

Mr. B. D. Day, builder, Wilton-road, Pimlico, left £15,074.

Mr. W. Oatley, of Aldermanbury, E.C., and of Amhurst Park, Stamford Hill, N., retired builder, left £35,234.

Mr. Thomas George Walter Waterman, of Forest Gate and Limehouse, builder, left £6,869 (net personalty £4,831).

Mr. J. T. W. Chaplin, of Messrs. A. & J. Chaplin, Smith-street, builders (net personalty £10,135), left £17,268.

Mr. George Sidgwick Johnson, of Park-road, Stockton-on-Tees, builder (net personalty £12,994), left £13,325.

Mr. John Hill, of Chaxhill Hall, Westbury-on-Severn, Glouc., builder (net personalty £1,451), left £6,816.

Working-class Houses, Stalybridge.

The Stalybridge Town Council have decided to erect 106 houses of the cheaper working-class type on the Hague site, and sanction has been received from the Minister of Health to borrow £37,577. It is also the intention of the Town Council to erect working-class houses at the junction of Backton Vale-road and Huddersfield-road, between Millbrook and Hey Heads.

Painting of London Bridges.

Five London bridges, Hammersmith, Vauxhall, Blackfriars, Southwark, and Tower Bridge, are being repainted. The first two are under the control of the London County Council, and the others under the City Corporation. The repainting of Hammersmith Bridge will cost £2,400, and Vauxhall Bridge £4,660.

THE SCOTTISH BUILDER

NEW BUILDINGS

Inverness.—PUBLIC BATHS.—The Inverness Town Council is considering a scheme for new and up-to-date public baths to be erected at a probable cost of £16,000, including the cost of a site.

Motherwell.—HOUSES.—The Dean of Guild Court has sanctioned plans for the erection by Archibald Ferguson, in Ladywell-road, Motherwell, of four houses of four apartments each. In name of the Corporation plans were passed for the erection in the Glencairn housing area, Wishaw, of one block comprising four houses of three apartments and one block comprising four houses of two apartments.

Airdrie. — HOUSES. — The Airdrie Town Council has resolved, with the sanction of the Scottish Board of Health, to erect another 100 houses on an area to be feued at Wester Mavisbank. The houses will consist of 80 three-apartment and 20 two-apartment flatted dwellings.

Grantown.—BRIDGE.—The Moray County Council has stated that the centuries-old road-bridge over the Spey at Grantown, according to a report by the chief engineer to the L.M.S. railway, is incapable of repair. The estimated cost of erecting a new bridge is £23,000.

Glasgow.—BRIDGE.—The Statute Labour Committee recommend the erection of a new bridge, 70 ft. in width, on the site of the King's Bridge across the river Clyde at Govan-street. They propose that it be remitted to the Master of Works to prepare the necessary plans and specifications.

Glasgow.—MARKETS. — The Markets Committee of the Corporation propose that the work of constructing chill-room accommodation and loading bank at Armour-street be proceeded with. The probable cost will be £40,000.

Glasgow.—HOUSES.—The Statute Labour Committee recommend that no objections be offered to a proposal by the Western Heritable Investment Co., Ltd., to construct sewers, streets, and 552 dwelling-houses at Meikle, Aikenhead.—Tenders, amounting in all to £89,123, for the construction of 318 tenement houses at Haghill rehousing scheme, Dennistoun, are recommended for acceptance.

Glasgow.—TELEPHONE EXCHANGE.—Tenders are being invited for the erection of a new telephone exchange at Muirend, Glasgow, for the Commissioners of H.M. Works, etc.

Glasgow.—HOUSES.—Included in the linings granted by Glasgow Dean of Guild Court is one sanctioning Mactaggart & Mickel, Ltd., to erect 74 dwelling-houses at King's Park-avenue. Glasgow E.C.'s plans to build temporary schools at Springfield-road and Elbe-lane were also passed. The Central Electricity Board were granted permission to erect steel towers at Barroch-street, Garngad-road, Blochairn-road, Fountainhill-road, and Bilsland-drive.

Edinburgh.—SCHOOL.—The Edinburgh Provincial Committee for the Training of Teachers has decided to proceed with the erection of a new school, at an estimated cost of £40,000, to take the place of Moray House demonstration school, and on the same site. The new school will accommodate 600 pupils.

Edinburgh.—CINEMA.—Property has been purchased by a local company in Deanhaugh-street, Stockbridge, and it is proposed to erect on the site a new house to be called the Carlton.

Report on Timber.

The tenth report of the Imperial Economic Committee, dealing with timber, has just been issued, and may be obtained, price 9d. net, from H.M. Stationery Office, Kingsway, London, and usual branches and booksellers. We propose to deal with this Report in an early issue.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rate of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons' †; Bricklayers'‡; Plasterers'†
Aberdeen	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Airdrie	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Alexandria	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Arbroath	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/5½	1/1
Ayr	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2½
Bathgate	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Coatbridge	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumbarton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Dumfries	1/6½	1/6½	1/6½	1/7½	1/6½	1/6½	1/6½	1/2
Dundee	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3 †1/2½
Dunfermline	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	‡1/2½ †1/2½
Edinburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/6½	1/7	1/6½	1/7	1/6½	1/6½	1/7	1/2
Glasgow	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Greenock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Hamilton	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7	1/2½
Inverness	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/- to 1/2
Kilmarnock	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	1/2½
Kirkcaldy	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Leith	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/3½ †1/2½
Motherwell	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Perth	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	‡1/2½ †1/2½
Stirling	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/7½	1/2½
Stirlingshire (Eastern District)	1/7½	1/9	1/7½	1/8½	1/7½	1/7½	1/8	1/2½ ‡1/2½ †1/2½
Wishaw	1/7½	1/7½	1/7½	1/8½	1/7½	1/7½	1/8	

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 440.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	,, ,,	1	0
Add for every additional depth of 6 ft.	,, ,,	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	,, ,,	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	38	0
Add if in underpinning in short lengths	,, ,,	7	0
Add if in floors 6 in. thick	,, ,,	3	3
Add if in beams	,, ,,	3	9
Add if aggregate 1 : 2 : 4	,, ,,	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	,, ,,	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	32	0	0
Add if in stocks	,,	7	10	0
Add if in Staffordshire blues	,,	22	0	0
Add if in Portland cement and sand	,,	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1¼

POINTING.

Neat flat struck or weathered joint	,, ,,	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	,, ,,	0	0	10
Axed in stocks	,, ,,	0	1	9
Rubbed and gauged jointed in putty camber or segmental	,, ,,	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	,, ,,	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	,,	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	,, ,,	9	6
Three-quarter-inch on flats in two thicknesses	,, ,,	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	,, ,,	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	,, ,,	22	0
Bath stone and all labour fixed	,, ,,	10	6
Beer stone and all labour fixed	,, ,,	15	0
Portland stone fixed	,, ,,	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	,,	80	9
Do. 24 in. × 12 in. Do. Do.	,,	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0
Do. joists	,, ,,	5	6
Do. roofs, floors and partitions	,, ,,	6	0
Do. trusses	,, ,,	8	6

	¾″	1″	1¼″	2″
Deal rough close boarding per sq.	35/6	40/-	45/-	72/-

Flat centering for concrete floor, including struts or hangers	,,	50	0
Do. to beams	per ft. sup.	0	11
Centre for arches	,,	1	6
Gutter boards and bearers	,,	1	0

FLOORING.

	¾″	1″	1¼″	1½″
Deal-edges shot per sq.	—	44/6	53/-	60/6
Do. tongued and grooved ,,	—	49/-	57/6	65/-
Do. matchings ,,	45/-	51/-	—	—
Moulded skirting, including backings and grounds per ft. sup.	1/6	1/9	2/-	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	,, ,,	2	1
Add for fitting and fixing	,, ,,	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights ; average size	,, ,,	3	9

DOORS.

	1½″	1¾″	2″
Two-panel square framed per ft. sup.	2/1	2/4	2/6
Four-panel Do. ,,	2/5	2/8	2/11
Two-panel moulded both sides ,,	2/8	2/11	3/2
Four-panel Do. Do. ,,	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1″	1¼″	1½″
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bea ers	,,	1/4	1/6	1/9
Add if cross-tongued	,,	2d.	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2″	2½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail : average, 3 in. × 3 in.	,, ,,	6	0
Add if ramped	,, ,,	12	0
Add if wreathed	,, ,,	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	,,	19	0
Do. stanchions	,,	21	9
In roofwork	,,	27	6

RAIN-WATER GOODS.

		3″	4″	5″	6″
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	,,	1/9	2/-	2/6	3/3
Rain-water pipes with ears	,,	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	,,	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	,,	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	43	0
Do. Do. in flats	,,	42	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	,, ,,	1	3
Copper nailing	,, ,,	0	3

	½″	¾″	1″	1½″	2″	4″
Drawn lead waste per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service ,,	1/8	2/2	2/7	3/10	—	—
Do. soil ,,	—	—	—	—	—	6/9
Bends in lead pipe each	—	—	—	—	3/3	8/2
Soldered stop ends ,,	1/2	1/8	2/1	2/10	3/6	—
Read lead joints ,,	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints ,,	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws ,,	—	—	—	14/7	19/6	—
Bib cocks and joints ,,	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints ,,	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	6
Do. Do. Sirapite	,, ,,	2	9
Do. Do. Keen's	,, ,,	4	0
Add saw lathing	,, ,,	1	7
Add metal lathing	,, ,,	2	6
(Not including hangers or runners, etc., for suspended ceilings.)			
Portland cement screed	,, ,,	2	2
Do. plain face	,, ,,	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	6

GLAZIER.

		s.	d.
21-oz. sheet plain	per foot sup.	0	8½
26-oz. Do.	,, ,,	1	0
Obscured sheet	,,	1	1
⅛-in. rolled plate	,, ,,	0	9
¼-in. rough rolled or cast plate	,, ,,	0	10½
¼-in. wired cast plate	,, ,,	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	,, ,,	0	7
Plain painting, 1 coat	,, ,,	0	9
Do. 2 coats	,, ,,	1	2
Do. 3 coats	,, ,,	1	9
Do. 4 coats	,, ,,	2	4
Graining	,, ,,	2	3
Varnishing twice	,, ,,	1	9
Sizing	,, ,,	0	3
Flatting	,, ,,	0	7
Enamel	,, ,,	1	1
Wax polishing	per foot sup.	0	6
French polishing	,, ,,	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE ITEMS

Builders' Cricket Match.

The competition for the cricket cup presented by Mr. C. J. Bennett, the President of the London Master Builders' Sports Association, has resulted in the Holloway Athletic Association and Wm. Downs Sports Club heading the list in Sections 1 and 2. The final match for the cup is to be played on Saturday, September 22, at the Portland Sports Club Ground, Snaresbrook, Essex, which is quite easily reached by train or bus from Liverpool-street.

Egyptian Contract Open.

The Commercial Secretary at Cairo (Mr E. H. Mulock) reports that the Ministry of Public Works is calling for tenders, to be presented in Cairo by October 1, 1928, for the supply of door and window fittings. Firms desirous of offering goods of British manufacture can obtain further particulars of this call for tenders upon application to the Department of Overseas Trade, 35, Old Queen-street, S.W.1. Reference number BX4705 should be quoted.

Effect of Moisture on Materials.

The Department of Scientific and Industrial Research has issued (H.M. Stationery Office, 1s. net) Building Research Bulletin No. 3, dealing with the effects of moisture changes on building materials. Moisture changes produce important effects on the properties of building materials. These effects are at present insufficiently realised, and this series of lectures is intended to show the necessity for giving them serious attention. We learn from the Department that some interest in the subject has been aroused, and requests for further information have been received. The Bulletin is issued in order to meet these requests. The pamphlet is fully illustrated, and contains a number of valuable diagrams.

Thermal Conductivities of Walls, etc.

"Thermal Conductivities of Walls, Concretes and Plasters" is the title of Technical Paper No. 6 issued by the Department of Scientific and Industrial Research (H.M. Stationery Office, 9d. net). We learn that this technical paper, which is essentially a reprint of Special Report No. 7 (Heat Transmission through Walls, Concrete and Plasters), has been issued in response to requests for the information contained in the original report. The general subject of heat transmission, which was dealt with briefly in the introduction to the report, is to be discussed in more expanded form in a new special report which is now in course of preparation. Photographs and diagrams fully illustrate the text, which is based on work conducted at the National Physical Laboratory.

The First National Glass Convention.

The First National Glass Convention will be held at Bournemouth, from September 19 to 22, 1928, presided over by Mr. W. Butterworth, M.A., J.P., President of the Society of Glass Technology. The Mayor of Bournemouth, Alderman Thwaites (a past-master of the Glass Sellers' Company of the City of London) will open the Convention, which will be held in the Town Hall. The meetings will be devoted to discussions on the organisation of the glass industry, with a conference on legislation, and the Convention will close with a banquet at the Town Hall, at which Mr. Douglas Hacking, O.B.E., M.P., Parliamentary Secretary to the Department of Overseas Trade, will be the chief guest, and other Members of Parliament will be present. A preliminary brochure containing the programme will be sent to anyone connected with the British glass industry upon application to either of the Joint Secretaries of the Glass Convention: Professor W. E. S. Turner, D.Sc., M.Sc., Society of Glass Technology, Darnall-road, Sheffield; or Mr. Geoffrey Marchand, M.A., Glass Manufacturers' Federation, Aldwych House, London, W.C.2.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 117, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

ROBERTS & CO. (BIRKENHEAD), LTD. (230,905). Registered June 1. 107/109, Argyle-street, Birkenhead. Plumber and builders' merchant. Nominal capital, £12,000.

REINFORCED CONCRETE HOUSES, LTD. (230,123). Registered May 1. Adelphi-terrace House, 2, Robert-street, Adelphi, W.C. 2. Nominal capital, £5,100.

J. SOUTHWORTH, LTD. (230,056). Registered April 28. Plumbers, glaziers, heating and sanitary engineers, etc. Nominal capital, £500.

STONE, SAND AND GRAVEL CO., LTD. (229,965). Registered April 25. 186, Wolverhampton-street, Dudley. Quarry owners, etc. Nominal capital, £1,000.

ROUGH CAST BUILDING CO., LTD. (230,363). Registered May 10. 23, King-street West, Manchester. Nominal capital, £11,000.

PERRY & CO. ROADS (FOREIGN CONCESSIONS), LTD. (230,395). Registered May 11. 56, Victoria-street, Westminster, S.W. Road contractors, etc. Nominal capital, £5,000.

J. E. BUTTERWORTH, LTD. (230,414). Registered May 12. 32, High-street, Lees, Oldham. Decorator, painter, paperhanger, etc. Nominal capital, £1,000.

PEAK CHERT MINES, LTD. (230,336). Registered May 9. Quarry masters and stone merchants, etc. Nominal capital, £3,000.

A. J. GLOCK, LTD. (230,941). Registered June 4. 2, Southend-lane, Southend Village, S.E.6. General building contractor. Nominal capital, £15,000.

LOCKHART'S BRICKWORKS, LTD. (230,969). Registered June 5. Brickmakers, etc. Nominal capital, £3,500.

KEY PAINT COMPANY, LTD. (232388). Registered July 30. 15, Caroline-street, W.C.1.

LANCASHIRE GRANITE & TARMACADAM CO., LTD. (232414). Registered July 31. Nominal capital, £5,000.

ARTHUR BEAN, LTD. (232404). Registered July 31. Builder and contractor. Station-road, Belmont. Nominal capital, £5,000.

HERBERTS (BUILDERS), LTD. (232365). Registered July 28. Builders, decorators, etc. Nominal capital, £100.

FREEMAN BROTHERS (HARPENDEN), LTD. (232358). Registered July 28. Leyton-green, Harpenden, Herts. Builder and contractor and sand and gravel merchant. Nominal capital, £2,000.

TAYLOR & CO. (BUILDERS' MERCHANTS), LTD. (232306). Registered July 26. 8, Capel-parade, Harley-road, Willesden Junction, N.W. Builders' merchants. Nominal capital, £5,000.

H. BAKER & SON (BUILDERS), LTD. (232257). Registered July 25. Southwater, Sussex. Builder and contractor, carried on at Southwater. Nominal capital, £5,000.

BRITISH CALOL ASPHALT CO., LTD. (232420). Registered August 1. 9, Idol-lane, E.C.3. Nominal capital, £100.

PATENT TILE KERB CO., LTD. (232448). Registered August 1. Back of 661, Finchley-road, Child's Hill, N.W.2. Tile kerbs, etc. Nominal capital, £1,000.

SOUTH-WEST HOMES, LTD. (232533). Registered August 4. 242, High-street, Acton, W.3. Builders and building contractors, etc. Nominal capital, £1,000.

J. K. FORD & WESTON, LTD. (232508). Registered August 3. Builders and contractors, Osmaston-road, Derby. Nominal capital, £30,000.

T. S. KNIGHT & SONS, LTD. (232535). Registered August 4. 222, Great Portland-street, W.1. Heating and ventilating engineers, etc. Nominal capital, £2,000.

A. P. LEWIS & SONS, LTD. (232557). Registered August 7. 22, Duke-street, Burton Latimer, Northamptonshire. Builders and general contractors. Nominal capital, £3,000.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*.
† Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modifications*.

Accrington.—49 houses on the Spring Hill estate, Willows-lane, for the T.C. Mr. H. Sanderson, Borough Engineer:—
*Garbutt & England, Cudworth £17,640

Allerton.—Extensions to the Crown Hotel, for Offiliers Brewery Co., of Derby. Colonel M. Hunter, O.B.E., F.R.I.B.A., All Saint's-chambers, Irongate, Derby:—
*John W. Hayes, Belper.
Slater—
*Fergusson & Son, Leicester.
Plumber—
*P. & F. Davison, Derby.
Painter—
*A. Potts & Son, Derby.

Annfield Plain.—Church of St. Aidan's, for the trustees. Messrs. Hicks & Charlswood, AA.R.I.B.A., architects, 4, Mosley-street, Newcastle-on-Tyne:—
*J. Jackson & Son, Newcastle £4,000

Ashburton.—Three parlour-type houses on the Fourlanes housing site, for the U.D.C. Mr. T. P. Jordan, architect and surveyor, West-street:—

F. J. Badcock, Ashburton	£1,706
F. Eales, Ashburton	1,416
S. C. Eales & Son, Torquay	1,575
†Williams & Bishop, Buckfastleigh	1,310
J. W. Cox, Newton Abbot	1,536
Baker, Moulder & Stephen, Ashburton	1,480

Barnsley.—Detached residence in Cavendish-road. Mr. J. R. Wilkinson, L.R.I.B.A., 15, Regent-street:—
Bricklayers' Work—
*Moorhouse Bros., Barnsley.
Joiners—
*Watling & Son, Barnsley.
Plasterer—
*A. Wilson, Monk Bretton.
Painter—
*Wilson, Painter, Mapplewell.

Barnstaple.—Greenhouse and heating apparatus, for the Cemetery for the Barnstaple Burial Board. Mr. J. C. Southcombe, architect, Cross-street:—
*R. Ridge, Barnstaple.

Belfast.—Additions and alterations to the Riddel Memorial Public Elementary School, Malvern-street, for the C.B. Education Architect, Victoria-street. Quantities by Mr. S. C. Hunters, F.S.I., 2, Wellington-place:—
*Isaac Callen & Co., Belfast £4,098

Birkenhead.—Bandstand in Birkenhead-park, for the Corporation. Mr. R. W. Johnson, Borough Engineer and Surveyor:—
*Corporation's Works Department, Birkenhead.

Birkenhead.—191 non-parlour and 17 parlour-type, in Town-lane, Higher Bebington, for the C.B. R. W. Johnston, Borough Engineer and Surveyor:—
*Lloyd & Cross, Birkenhead.

Birmingham.—Shops at Yardley Wood-lane and Brook-road, Billesley. Messrs. Joseph Perry & Wilson, architects, Corporation-street:—
*Arden Bros., Birmingham.
Plumbers—
*Gaunt & Ganderton, Birmingham.
Plasterer—
*J. Osbourne, Birmingham.
Tiles—
*Broadbent & Stephens, Leicester.

Birmingham.—Two wards to the existing ward block and the erection of an isolation block, for the Committee of the Children's Hospital, Ladywood-road. Messrs. Martin & Martin and W. H. Ward, L.R.I.B.A., architects, 106, Colmore-row, Birmingham:—
*W. Sapcote & Sons, Birmingham £16,237

Birmingham.—Additions to the Woodlands Hospital, Northfield, for the Board of Management of the Royal Cripples' Hospital. Messrs. Bateman & Bateman, FF.R.I.B.A., architects, 80, Bennetts-hill:—
*R. Fenwick & Sons, Ltd., Birmingham £25,000

Blackpool.—Branch library and reading room in Claremont-road, for the C.B.:—
*H. H. Vickers & Son, Blackpool.

Blackpool.—Structural alterations at the Home for the Blind in Hornby-road, for the Blackpool and Fylde Society for the Blind. Mr. Francis Wood, Borough Engineer and Surveyor:—
*Potts & Pickford, Blackpool.

Bradford.—School on the Bolling Hall estate. Mr. W. Williamson, F.R.I.B.A., City Architect:—
*J. Moulson & Son, Ltd.
Carpenter—
*J. Moulson & Son, Ltd.
Slater—
*H. Wilkinson.
Plumber and glazier—
*Atkinson & Smith.
Plasterer—
*T. Feather.
Painter—
*A. Dibb.
Steelwork—
*S. Butler & Co.
(All of Bradford.)

Bradford.—Premises for the Independent Order of Rechabites in Manor-street. Mr. T. L. Dixon, architect, Stanwix House:—

Masons—
*Gadie, Bradford.
Steelwork—
*Barrett, Bradford.
Joinery—
*Balmford & Son, Bradford.
Floors—
*Lowe & Co., Liverpool.
Plasterers—
*Sugden & Son, Bradford.
Slaters—
*Hillman, Bradford.
Heating Installation—
*Wiggins, Bradford.
Painting—
*Robinson, Bradford.
Lifts—
*G. Porteous & Sons, Leeds.

Bridlington.—Public lavatories in Westgate Park, for the T.C. Borough Engineer and Surveyor:—

*J. W. Eggleston, Medina-avenue, Bridlington	£499 9 10

Brierley Hill.—14 houses on the Moors estate, for the U.D.C.:—

*Batham & Beddall, Brierley Hill ... £5,418

Burnham-on-Crouch.—18 houses, for the U.D.C. Mr. J. Cook, surveyor, 10, High-street:—

H. Nethercoal, Burnham-on-Crouch	£7,156 13 4
W. Connell, Brentwood	6,300 0 0
A. E. Sparrow, Colchester	6,228 0 0
Essex Homes, Ltd., Billericay	5,594 0 0
J. E. Smith, Burnham-on-Crouch	5,897 0 0
G. Gould, Burnham-on-Crouch	5,675 0 0
*Challis Bros., Burnham-on-Crouch	5,598 0 0

Bury St. Edmunds.—Concrete retaining walls and extending the brick arches and abutments of Tostock-Woolpit Bridge, for the West Suffolk C.C. Mr. E. H. Bond, County Surveyor, Shire Hall, Bury St. Edmunds:—

A. E. Farr, London	£1,153 0 0
H. G. Frost, Bury St. Edmunds	943 3 0
C. Maidwell & Co., Stowmarket	900 0 0
A. Deeks, Kedington	892 10 6
E. G. French, Birdbrook	859 19 6
J. Noller, Ipswich	811 0 0
*Hervey & Olson, Aldeburgh	733 10 0

Cannock.—New Council school at Bridgtown, to accommodate 300 children, for the U.D.C.:—

*C. Mason & Sons, Hednesford £7,150

Castlebar.—4 houses, for the U.D.C.:—

*J. P. McCormack £1,237

Coalville.—New bakery, for the Co-operative Society:—

J. Green, Gedling	£45,360
Greenwood's (Mansfield), Ltd.	43,194
Holmes & Sons, Burton	42,000
J. R. Cooke, Ltd., Leicester	41,100
A. Foulks, Loughborough	40,445
Griffin Bros., Hugglescote	39,975
J. E. Jervis, Ltd., Longeaton	39,786
E. Orton & Dalby, Hugglescote	38,979
W. Moss & Son, Coalville	38,699
Orton & Co., Coalville	37,848
T. Lowe & Son, Burton	36,795
*C.W.S. Building Department	36,555

Donegal.—Tenders accepted by the Co. Donegal Board of Health:—

Repairs to Donegal Hospital—	
*J. Hegarty	£1,723
Repairs to Ballyshannon Hospital—	
*J. Dundas	850
Repairs to County Home Chapel—	
*J. McCafferty	120
Repairs to cottages—	
*J. Duffy Milbay	240
*R. Gibson, Ballyholey	135
*Holmes Bros., Manorcuningham	700
*J. Muldoon, Donegal	379
*C. Harkin, Drumbeagh	448

Dundalk.—Strengthening of a quay wall and erection of a wharf, for the Harbour Board:—

*Yorkshire Hennebique Co. £13,270

Durham.—Bus garage at North-road, for the Northern General Transport C. Mr. A. H. Fennell, architect, Bridge End-chambers, Chester-le-Street:—

*C. Groves, Chester-le-Street.

Gateshead.—Premises in High-street, for Messrs. Montague Burton, Ltd. Mr. Harry Wilson, architect, 81, North-lane, Leeds:—

*A. Holmes & Co., South Shields.

Glasgow.—Alterations to laundry premises in Carstairs-street, Bridgetown. Messrs. Miller & Black, architects, 58, Renfield-street:—

*T. Stevenson, Glasgow.

Gloucester.—Additions at the Over Hospital, for the T.C.:—

*Byard & Sons, Gloucester £3,810

Halifax.—94 houses on the Moor End-road housing site, for the C.B. Borough Engineer:—

Mason—
*Pickles Bros., Ltd.
Carpenter and joiner—
*H. I. Bates.
Slater—
*S. Hepworth & Son.
Plasterer—
*W. Tidswell & Son.
Plumber—
*Fred Stocks.
Painter—
*Halifax Corporation.
Electrician—
*E. Mitchell.

(All of Halifax.)

Hitchin.—Additions and alterations to the North Hertfordshire and South Bedfordshire Hospital, for the Council. Mr. Brian L. Sutcliffe, A.R.I.B.A., architect, 44, Chancery-lane, London, W.C.2. Mr. Horace W. Langdon, F.S.I., quantity surveyor, 292, High Holborn, London, W.C.1:—

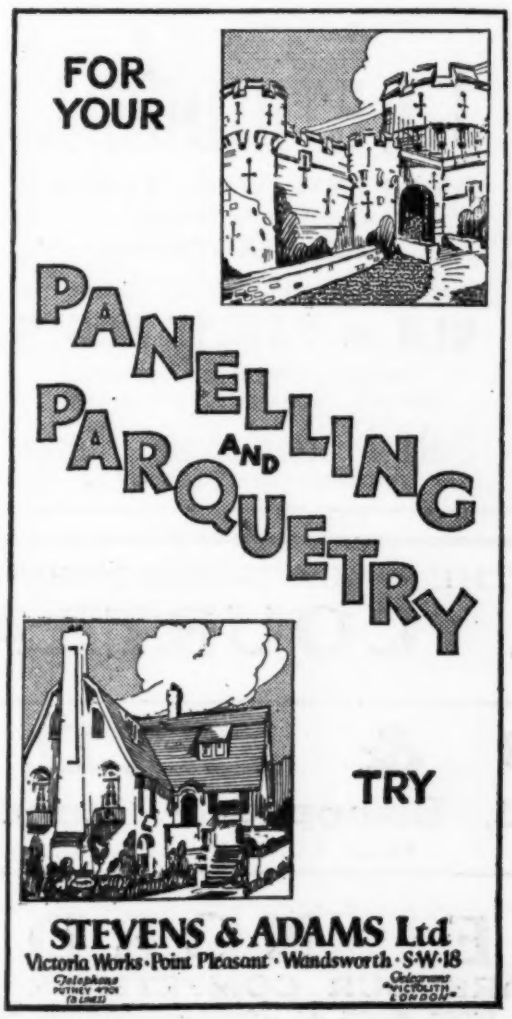
William Austin & Sons	£6,628 14 10
John Wilmot & Sons, Ltd.	6,481 3 2
S. H. Palmer	6,423 14 6
Pettengell & Clarke	6,300 19 10
H. E. Hurst	6,294 0 0
William French	6,205 0 0
John Ray	6,110 4 8
M. & F. O. Foster	6,100 0 0

Kintore.—Third block of houses, for T.C.:—

Masons—
*G. Duncan & Son, Inverurie.
Carpenters—
*J. Buchan & Son, Monymusk.
Slaters—
*G. Macdonald & Son, Dyce.
Plasterer—
*R. Murdoch, Inverurie.
Plumber—
*P. Thomson, Aberdeen.
Painter—
*R. Petrie, Aberdeen.
Electric Work—
*J. B. Reid, Aberdeen.

Laurencekirk.—3 blocks of four apartment houses for the Town Council. Mr. A. F. Macintosh, Burgh Surveyor:—

Mason—
*Alex. Adamson, Laurencekirk.
Plasterer—
*Burness & Son, Montrose.
Painter—
*A. Middleton & Son, Laurencekirk.
Plumber—
*James Mitchell, Laurencekirk.
Joiner—
*Stuart & Balfour, Laurencekirk.
Slater—
*Anderson Willcocks, Laurencekirk.



Leicester.—Alterations and additions to Aylestone Park, Working Men's Club and Institute and Steward's House. Messrs. Brown & Jones, L.R.I.B.A., architects, 4, Market-place:—

Plumber—
*F. Adams.
Stonemason—
*W. Brown.
Plasterers—
*Rimmington & Neale.
Slaters—
*Cumming & Haddon, Ltd.
Painters—
*Mallord & Roberts.
Asphalters—
*J. W. Hewitt & Sons.
Iron work—
*R. C. Searle & Co., Ltd.
Electrician—
*Tarratt Bros.

(All of Leicester.)

Liverpool.—104 A.828 non-parlour type houses on the Norris Green estate, for the City of Liverpool. Acting Director of Housing:—

*R. Costain & Sons, Ltd., Fazakerley.

Liverpool.—Demolition work and reinstatement work at 34, Breckfield-road, for the Corporation:—

*J. Rimmer, Liverpool.

Liverpool.—Buildings for the Yorkshire Insurance Co., Ltd., at the corner of Rumford-place and Chapel-street, Liverpool. Messrs. T. Wainwright & Sons, architects, 11, Lord-street:—

*W. Tomkinson & Sons.
Steelwork—
*Redpath, Brown & Co., Ltd.
Slating and Plastering—
*J. B. Johnson & Co., Ltd.
Carving—
*E. O. Griffiths, Esq.
Asphalt roofs—
*Ragusa Asphalte Paving Co., Ltd.
Glass and glazing—
*Williams & Watson.

(All of Liverpool.)

Liverpool.—Premises with frontages to Everton-road and Radcliffe-street, for Midland Bank, Ltd. Messrs. Woolfall & Eccles, architects, Midland Bank-chambers, 60, Castle-street:—

*Murray & Fowler, Liverpool.

London.—External redecoration and repairs at Bromley House Institution, Bromley-by-Bow, E.3, for the Stepney B.G.:—

*Yeoman, Spriggs & Co., Streatham.

Manchester.—Conversion of "Gratton House" into club, Whalley-road, Whalley Range, for the Alexander Conservative Club:—

*Redpath, Brown & Co., Ltd., Trafford Park.

Manchester.—Alterations and additions to premises, 3, Ogden-lane and Stanley-street, Openshaw, for Messrs. T. Acton & Son:—

*F. Goodyear & Son, Gorton.

Manchester.—Alterations to premises at Ford-street, Oldham-road, for Messrs. Hugh Stubbs & Co.:—

*G. Waite & Co., Manchester.

Manchester.—Extensions to premises, for Messrs. David Rosenfield, Ltd., Victoria-street. Messrs. Vowles & Johnson, architects, Manchester-road, Burnley:—

*E. J. Coope & Sons, Ltd., Manchester.

Manchester.—Reconstruction of the Christian Scientists Church at Knott Mill, for the Trustees. Mr. L. W. Pitchford, architect, 15, Cross-street:—

*W. Butterworth, Blackley.

Manchester.—School off King's-road, Longford-park, Chorlton-cum-Hardy. Mr. Harold Greenhalgh, architect, 15, Mawdesley-street, Bolton:—

*G. Powis, Manchester.

Manchester.—Store room to bakery at Parrott-street, Clayton, for Messrs. Price Bros.:—

*J. Riley & Son, Manchester.

Manchester.—Alterations and additions to premises, 739, Stockport-road, and Attwood-street, Longsight, for Richardsons (Manchester), Ltd.:—

*Peace & Norquoy, Ltd., Ancoats.

Middlesbrough.—Laundry at the North Ormesby Cottage Hospital, for the Board of Management. Messrs. Kitching & Archibald, F. & L.R.I.B.A., architects, 21, Albert-road:—

*H. McNaughton & Sons, Ltd., Middlesbrough.

Newcastle-on-Tyne.—Reconstruction of the premises of Messrs. Tapbrig & Co., Ltd., Blackett-street. Messrs. Percy L. Browne & Son, architects, Pearl-buildings:—

*Dodd, Newcastle-onTyne.

Newry.—Bridge across the River Tullyvallen, for the No. 2, R.D.C.:—

*A. Watt, Newtownhamilton £195

Pontefract.—New school to accommodate 500 children at Willow-park, for the Corporation:—

Carpentry and joinery work—	
*C. L. Jackson	£2,994 10 8
Excavator, bricklayer and mason—	
*J. Featherstone	8,287 5 0
Slaters—	
*Stewart Bros. & Son	1,385 0 0
Plumber and glazier—	
*R. Leng	1,443 18 8
Plasterers—	
*T. W. Senior & Sons	404 5 0
Painter—	
*E. Priestley, Jnr.	309 15 0

Preston.—Vicarage at Bilsborrow, for Rev. J. Moss, Vicar of St. Hilda's Church. Messrs. Austin & Paley, architects, Castle Hill, Lancaster:—

*J. Turner & Sons, Preston £2,063

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Rugby.—12 houses at Pendred-road extension, Croop Hill, New Bilton, for the R.D.C. Mr. J. E. Weeks, surveyor and architect, Temple-street:—

D. Mitchell, Rugby	£4,785
A. T. Kimberley, Banbury	4,799
A. Hall & Son, Coventry	4,764
F. Bell, Rugby	4,758
W. H. Taplin, Rugby	4,650
W. H. Adams & Sons, Rugby	4,485
*W. T. Harding, Coventry	4,200

Sandbach.—Alterations at Winterly branch, for the Sandbeach Industrial Co-operative Society, Ltd. Messrs. Alfred Price & Son, architects, 11, Middlewich-road:—
*Geo. Edwards & Co., Ltd., Stoke-on-Trent £387 10 6

Sheffield.—Houses for the T.C.:—
‡H. Freckingham & Sons (37) ... £13,770 0
‡M. J. Gleeson, Ltd. (57) 18,952 10

St. Albans.—Wesleyan Methodist church in Hatfield-road. Mr. Chas. Gordon Smith, architect, 56, Cannon-street, E.C.4:—
*E. Dunham, St. Albans £5,725

Stony Stratford.—Alterations to St. Giles Church, for the Parochial Council. Messrs. Bodley & Hare, architects, 11, Gray's Inn-square, W.C.1:—
*A. W. Gurney & Son, New Bradwell.

Stretford.—Structural alterations to Old Trafford library, for the U.D.C.:—
*Arbuckle & Son, Old Trafford £498 10

Tortington.—Mill premises, for Messrs. Kirkle's Silk Co.:—
*James Byron, Ltd., Bury.
Steelwork—
*Webb & Son, Ltd., Bury.
Plumbing—
*H. Brown, Tortington.
Painting—
*Lomax & Riding, Tortington.

Tutbury.—Factory for the Vacuum Timber Process, Ltd.:—
*Burton Constructional Iron Co., Ltd., Burton-on-Trent.

Walsall.—Completion of the Great Barr Colony, for the Walsall and West Bromwich Unions Joint Committee. Mr. G. McMichael, A.R.I.B.A., architect, 105, Colmore-row, Birmingham:—
*T. Lowe & Son, Ltd., Burton-on-Trent.
*W. Kendrick & Son, Walsall.
Heating—
*Couzens & Akers, Ltd., Birmingham.
*Jones & Attwood, Ltd., Stourbridge.
Electrical Installation—
*Coley & Swinnerton, Wolverhampton.
Electric Lighting—
*Reynolds & Bradwell, Birmingham.

Wellingborough.—Additions to St. Mary's Church. Mr. J. N. Comper, architect, of London:—
*C. Adams & Co., Wellingborough.

Worksop.—Premises at Whitwell, for the Worksop Co-operative Society, Ltd., 16-20, Eastgate. Mr. J. Haslop, architect, Bridge-street:—
*J. E. Smith, Worksop.

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